

SEPTEMBER 1960 VOLUME 2 NUMBER 9

architectural  
& engineering

# NEWS

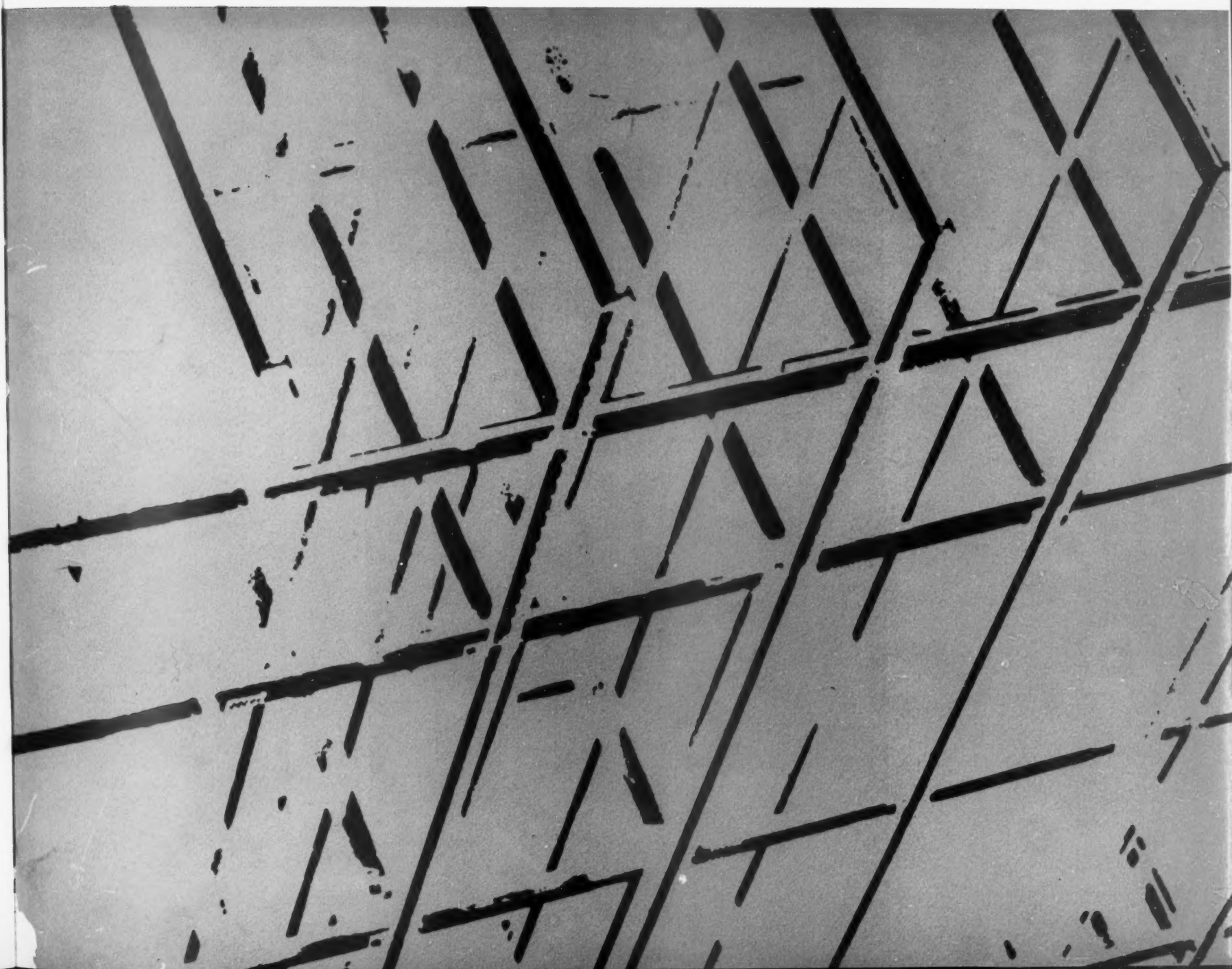




Plate No. 1060

HOLY REDEEMER HOSPITAL  
Bethayres, Penna.

Architects & Engineer:  
GEORGE E. YUNDT  
GEORGE E. YUNDT IV  
Allentown, Penna.

Tile Contractor:  
ROMAN MOSAIC & TILE CO.  
Philadelphia, Penna.

## Specify **ROMANY•SPARTAN...** the extra value ceramic tile

When you select floor and wall finishes, what qualities do you consider most important? Beauty... low initial cost... minimum maintenance... permanence? It makes no difference—you get them all—when you specify Romany•Spartan ceramic tile.

Here's why. Through leadership in research and quality control, Romany•Spartan is constantly introducing new, improved products—making the best even better. For example: Romany•Spartan's exclusive buff body is fired at a higher temperature for extra hardness; glazes are thicker—shading more uniformly controlled; and new "Level-Set" 4 1/4" tile is precision-ground—the world's only precisely sized glazed wall tile. It goes up faster for the best looking installation you ever saw.

Call on your nearby Romany•Spartan sales representative for on-the-spot information, samples or design help. United States Ceramic Tile Company, Dept. AE-15, Canton 2, Ohio.



Plate No. 1063

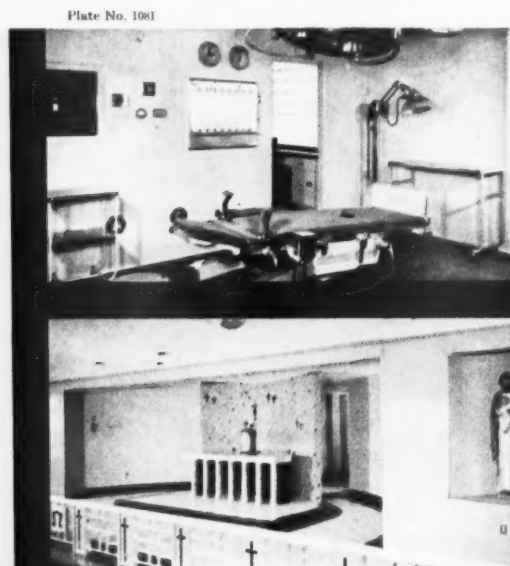


Plate No. 1061

Plate No. 1062



UNITED STATES CERAMIC TILE COMPANY



### SUBSCRIPTION POLICY

Architectural & Engineering News is published monthly by Hagan Publishing Corporation, 452 Fifth Avenue, New York 18, N.Y. Circulated without charge to Architects registered in the United States and licensed Professional Engineers designated by those architects as their consultants in the structural, mechanical, and electrical aspects of architecturally designed construction. Subscription to others: per year \$10.00 U.S.A. and Canada; \$25.00 in foreign countries; \$1.00 per single copy, U.S.A. and Canada; \$2.50 per single copy in foreign countries. Copyright 1960, Hagan Publishing Corporation. All rights reserved. Printed in U.S.A. Address all correspondence to: Architectural & Engineering News, 452 Fifth Avenue, New York 18, N.Y.

**BPA**

This month, special emphasis is placed on the creation of interiors by architects. Tony Palladino has expressed this theme by a cover that underscores the interplay of space in its two and three-dimensional aspects—elements that are inherent in architectural design. Photograph by Carole Greenberg.

← Circle 100 for further information

# 9

*David B. Hagenbuch*  
co-publisher

*Edward J. Fregan*  
co-publisher

*John James Carlos, AIA*  
editor

*Kay Susmann*  
associate editor

*Fredric P. Sonenberg*  
assistant editor

*Tony Palladino*  
graphic consultant

*Anne L. Tingo*  
editorial assistant

*Robert S. Wilson*  
circulation and production  
manager

*technical advisory panel*  
structural engineering  
*Martin Lovett, PE*

*building technology:*  
*Samuel S. Adlerstein, AIA*  
mechanical and electrical  
engineering:

*Henry Wald, PE*  
*field construction:*  
*R. Cornell Hooks, AIA*

**69 Editorial: post script on interiors**

**5 Forecast: construction outlook: 1960—7 months**

**12 Fogel: ethyl silicate & architecture**

**14 Pepper: interior design & the architect**

**21 Pictorial survey: interiors by architects**

**2 Communications**

**4 Gazette**

**6 A/E news**

**31 Products, equipment, materials**

**52 Literature**

**63 Preview: 21/Temple University Physics Building**

**65 Digest: 21/painting non-metallic surfaces**

**68 Names: Minoru Yamasaki, FAIA**

**71 Calendar**

**70 Index to advertisers**

**Readers service cards**

**facing pages 1 and 70**



## COMMUNICATIONS

*A/E NEWS welcomes the opinions of its readers. Letters should be addressed to: Editor, Architectural and Engineering News 452 Fifth Ave., N. Y. 18.*

### Stock school plans

Editor:

Reference is made to your Editorial on "Stock School Plans" in the June 1960 A/E publication.

In particular, I am referring to the latter portion of the very first paragraph in which you indicate the use of "Stock School Plans" by school districts, within the State of New York, with populations of less than 70,000, etc., to be "mandatory." This is incorrectly reported.

I am enclosing a copy of the law as passed by the Senate (Assembly law similar) for your information and with the hope that this very important point might be clarified for the record and all concerned.

At this point I would like to note that I have thoroughly enjoyed reading your publication each month and have found it to be quite informative—keep up the good work in the future.

*Very truly yours,*  
Albert C. Brevetti, AIA  
Senior Architect  
Division of Architecture  
N.Y.S. Dept. of Public Works  
Albany, N. Y.

**Editor's note:** The law referred to is as follows:

"An act to amend the education law, in relation to the preparation or acquisition of plans and specifications which school districts at their option may adopt.

"The People of the State of New York, represented in Senate and Assembly, do enact as follows:

"Section 1. Article nine of the education law is hereby amended by inserting a new section, to be section four hundred eight-a, to read as follows:

"§408-a. Plans and specifications for construction of new school buildings. 1. The superintendent of public works, after consultation with the commissioner of education and subject to the approval of the director of the budget, shall promptly prepare or acquire as many master sets of complete plans and specifications for the construction of new school buildings and appurtenant facilities as shall be sufficient to provide at least six different master sets each for elementary, junior high and high schools, based on the number of pupils to be accommodated therein. Such plans and specifications shall be prepared so as to provide adequate classrooms and other necessary space and facilities at the lowest cost consistent with sound construction principles and practices, and the attainment of educational objectives, and shall provide for heating, ventilation, lighting, sanitation and health, fire and acci-



High-styled, one-piece chassis CORBIN UNIT LOCKS, with their versatile Master Ring Cylinders, fit right in with Corbin's New Construction Masterkey System!

MELODY DESIGN 911

Circle 101 for further information

Architectural & Engineering News



# NEW CONSTRUCTION MASTERKEY SYSTEM by CORBIN

No need for the costly procedure of resetting cylinders... Corbin's come up with the simplest answer—a new Construction Masterkey system!

Just put the Owner's Key into the same Corbin Lock that everybody used all through construction. Turn it once, and presto! you have an *entirely new lock system*.

Forget about resetting lock cylinders. Forget about collecting construction keys,

they're entirely obsolete. The Owner's Key has done it all—automatically! From now on, only Master, change and regular keys will work.

Here you have a tremendous advantage: time-saving, trouble-saving, cost-saving simplicity. Plus Corbin security—all in “one package”—another example of Corbin superiority! **It pays to make it Corbin—throughout!**



**P. & F. CORBIN DIVISION**  
THE AMERICAN HARDWARE CORPORATION  
NEW BRITAIN, CONNECTICUT

## COMMUNICATIONS

dent protection adequate to maintain healthful, safe, and comfortable conditions therein. Such plans and specifications shall be so prepared that any possible future addition to any such school building may be economically effectuated. In addition, the superintendent of public works shall, as often as he deems advisable but at least annually, review such master sets and, after consultation with the commissioner of education, and subject to approval of the director of the budget, may revise or cancel any of such sets or prepare new sets.

“2. The commissioner shall cause duplicates of such master plans and specifications to be made, and he shall furnish the same to any school district making a request therefor for a reasonable charge sufficient to cover the cost of reproducing such plans and specifications.

“3. Plans and specifications prepared and furnished pursuant to the provisions of this section may be adopted and used in any school district as the plans and specifications for the construction of any new school building or appurtenant facility hereafter to be erected.

“4. Nothing herein contained shall preclude any school district from retaining an architect and/or engineer in connection with the use of such master plans and specifications.

“§2. This act shall take effect immediately.”

### Acknowledgement to BRI

Editor:

I note in your June issue that the article by Henry L. Logan, “Trends in Electric Light Source Development and Utilization,” gives no credit whatsoever to the Building Research Institute as the source of the material; nor does the article by Dr. H. Richard Blackwell which begins on page 22...

Very truly yours,  
Jean H. Houtchens  
Manager, Information Services  
Building Research Institute  
Washington, D. C.

**Editor's note:** Our apologies for not giving due credit to the Building Research Institute for the cited papers which were delivered at the BRI Conference on Building Illumination, held May 1959.

### Architectural criticism

Editor:

I found your Editorial in the March issue one of the most concise and “down-to-earth” comments on a subject as amorphous as architectural criticism that I have read.

Your comment on “mediocrity... as an exigency of active practice” was particularly candid. Congratulations.

Edward K. Schroeder, Architect  
Palos Heights, Ill.

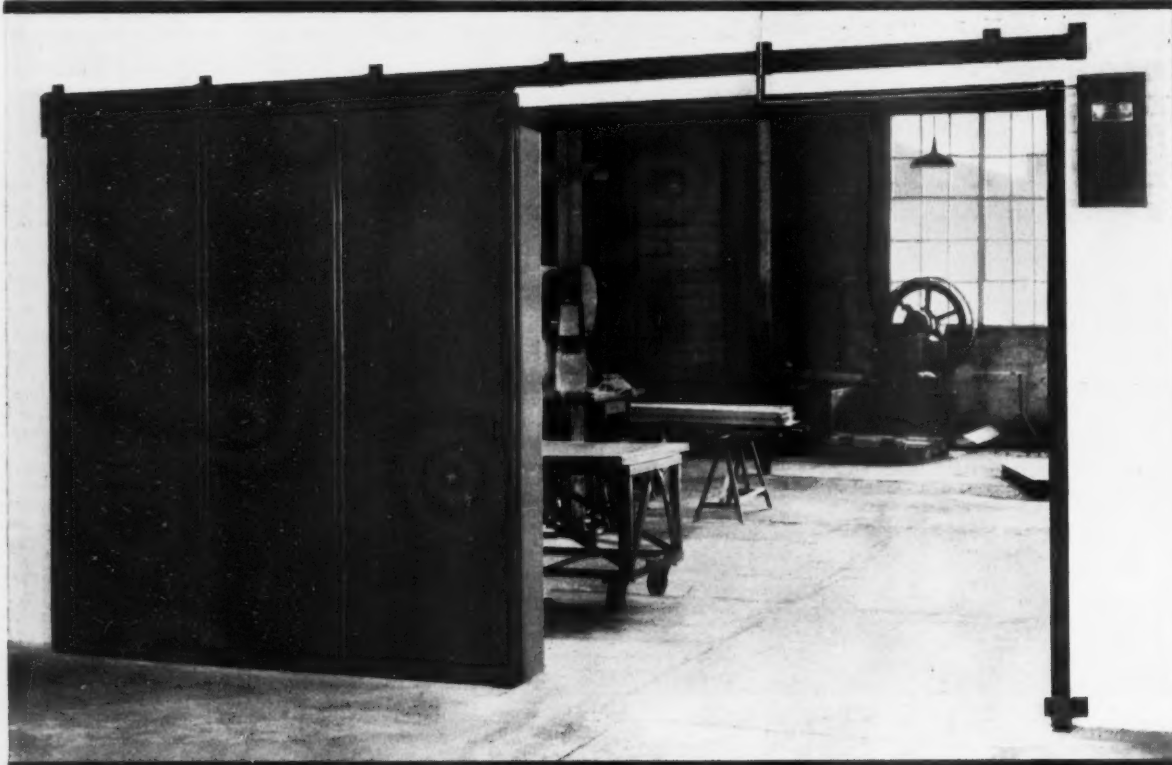
# NEW

NEW FLUSH DESIGN STYLING!

D-H

## SLIDING PyroDor<sup>®</sup>

NEW UTILITY • NEW APPEARANCE!



*Outmodes*  
OLD-TYPE FIRE DOORS



STANDARD FOR 60 YEARS —  
UNSIGHTLY HEAVY HARDWARE  
ROPE, PULLEYS, TRAVELING  
COUNTERWEIGHT, CLOSING DEVICE

The new, smooth, flush-designed Sliding PyroDor makes the old type tin-clad fire door a relic of the past. NOW Sliding PyroDors (Model SL) can be specified with the same proven fire-door construction as the D & H swinging PyroDor. Hardware is fully concealed and protected . . . against damage from material handling equipment. Armored Edges withstand plant traffic abuses . . . reduce maintenance repairs.

Pyromatic Automatic Door Closer permits manual operation at all times, yet, in case of fire, releases automatically. Controlled speed removes the danger of personal injury associated with gravity-closing doors.

Interlocking PyroPanel sections are unique . . . lower shipping, handling and installation costs. Complete information is available in a new 8-page Sliding PyroDor Catalog.

UNDERWRITERS' LABELED FOR CLASS "A"-3 HR. TEST  
Available also with "B"-1 1/2 HR and "C"-3/4 HR Labels

WRITE For New Dusing & Hunt Color Catalogs or Call your nearby D & H Distributor —  
Consult the Yellow Pages or Sweet's Architectural File, or Write direct.



### DUSING and HUNT, Inc.

67 LAKE STREET

Over 50 Years Manufacturing  
Fireproof Doors and Metal Trim

LE ROY, NEW YORK

Circle 102 for further information

## GAZETTE

John Haro, AIA, an Associate of Albert Kahn Associated Architects and Engineers, Inc., Detroit, has been appointed Chief Architectural Designer of the firm. Mr. Haro's appointment follows his recent return from nine month's travel and study abroad as the 1959-1960 recipient of Harvard University's Arthur W. Wheelwright Fellowship. Mr. J. S. Pettitt, Jr., of the same firm, has been appointed Assistant Chief Draftsman of the Architectural Department.

Charles Dabrush of Bergenfield, N.J., has won the Carl W. Keuffel Scholarship which is awarded each year to an outstanding high school graduate planning to study engineering at Stevens Institute of Technology. Mr. Dabrush accepted the award at the annual dinner of the New Jersey Society of Professional Engineers held recently at Spring Lake Country Club, N.J.

Four prominent engineers have been named Honorary Members of the American Society of Civil Engineers, the highest honor bestowed by the 45,000-member society. Those named were: Guy F. Atkinson, chairman of the board, Guy F. Atkinson Co., South San Francisco, Calif.; Frank Kerekes, Dean of Faculty, Michigan College of Mining and Technology, Houghton, Mich.; Solomon C. Hollister, Dean of the College of Engineering, Cornell University, Ithaca, N.Y.; Fred C. Scobey, Construction Hydraulic Engineer, Berkeley, Calif.

Walt J. Hanna, Jr., Gilroy engineer and land surveyor, has been elected president of the California Council of Civil Engineers and Land Surveyors for 1960. Other newly elected officers are: Charles W. Christiansen, San Diego, first vice-president; Harold Musser, Nevada City, second vice-president; and, William Pafford, Los Angeles, secretary-treasurer.

A new intermediate school has been named for Los Angeles Architect, Henry L. Wright, FAIA, first vice president of the institute. The Henry L. Wright School is now under construction in the Norwalk-La Mirada School District.

### Office announcements

Haulman/Dyer/Faller/Associates, Inc., announce the opening of their office for the practice of architecture and planning at 2809 North Blackstone Ave., Fresno 3, Calif.

Elliott Gitlin, AIA, and Marvin J. Cantor, AIA, announce the formation of a partnership for the practice of architecture under the name of Gitlin and Cantor, AIA, Suite 525, 261 Constitution Ave., N.W., Washington 1, D.C.

Thorshov & Cherney, Inc., to new offices at 300 First National Concourse Bldg., Minneapolis 2, Minn.

Blakewood Associates, Architects and Engineers, to new offices at 831 North St., Baton Rouge 2, La.

# FORECAST

## CONSTRUCTION OUTLOOK: FIRST SEVEN MONTHS OF 1960\*

The value of new construction put-in-place in July 1960 amounted to \$5.2 billion, according to preliminary estimates of the Bureau of the Census, U. S. Department of Commerce. These estimates were released for the first time this month on a new basis reflecting the revised, higher level of new private housing starts announced by the Census Bureau in May.

On the new basis, total new construction put-in-place in July 1960 was 3 per cent above the June 1960 level, approximately the normal increase between June and July, and 4 per cent below the July 1959 level. The cumulative value of construction expenditures in the first seven months of 1960 amounted to \$30.4 billion, 2 per cent below the \$31.2 billion expended during the first seven months of 1959.

The seasonally adjusted annual rate of total new construction expenditures was \$55.5 billion in July 1960, about the same as in June 1960. The annual rate of private construction expenditures increased slightly from \$39.8 billion in June 1960 to \$40.0 billion in July 1960. During the same period the annual rate of public construction expenditures declined about 2 per cent from \$15.8 billion in June 1960 to \$15.5 billion in July 1960.

### Private construction

Total new private construction expenditures in July 1960 amounted to \$3.7 billion, 4 per cent above the June level but 3 per cent less than in July 1959. Spending for construction of new private residential buildings increased 4 per cent between June and July, about the normal seasonal rise for this period. Private residential expenditures in July 1960 were 9 per cent less than in July 1959.

The seasonally adjusted annual rate of private residential expenditures was \$23.0 billion in July 1960, approximately the same as the June rate.

Total new private construction expenditures in the first seven months of 1960 amounted to \$22.0 billion, a slight increase over the level of expenditures in the comparable period of 1959. Expenditures for private residential construction in the first seven months of 1960 amounted to \$12.6 billion, a 7 per cent decline from the \$13.5 billion expended in the same period of

## NEW CONSTRUCTION PUT IN PLACE IN THE UNITED STATES INCLUDING ALASKA AND HAWAII FIRST SEVEN MONTHS 1960 COMPARED WITH 1959\*

### PRIVATE CONSTRUCTION

1959 (7 mos)		\$21,941	— .005% (59/60)
1960 (7 mos)		\$22,030	

### PUBLIC CONSTRUCTION

1959 (7 mos)		\$ 9,260	— 9% (59/60)
1960 (7 mos)		\$ 8,395	

### TOTAL NEW CONSTRUCTION

1959 (7 mos)		\$31,201	— 2% (59/60)
1960 (7 mos)		\$30,425	

\* COMPARISONS GIVEN IN MILLIONS—CONSTRUCTION ACTIVITY  
REPORTS OF U. S. DEPARTMENT OF COMMERCE, WASHINGTON, D. C.

1959. All other types of private construction showed greater total expenditures during the first seven months of 1960 than during the first seven months of 1959; the most significant increase was in expenditures for industrial buildings which increased 39 per cent, from \$1.1 billion in the first seven months of 1959 to \$1.6 billion in the first seven months of 1960.

### Public construction

New public construction expenditures in July 1960 amounted to \$1.5 billion, 1 per cent greater than in June 1960 but 6 per cent less than in July 1959. The June to July increase was slightly less than the normal seasonal rise for this period. Expenditures for most types of public construction in July 1960 were greater than in June 1960.

The cumulative value of public construction expenditures in the first seven months of 1960 amounted to \$8.4 billion, 9 per cent below the \$9.3 billion expended during the first seven months of 1959. Highway construction expenditures showed the greatest absolute decline from \$3.2 billion in the first seven months of 1959 to \$2.8 billion in the first seven months of 1960. However, the seven month expenditure totals for public residential construction showed the greatest percentage decline from 1959 to 1960, with a 35 per cent drop from the 1959 level of \$0.6 billion to \$0.4 billion in 1960.

### Value in constant dollars

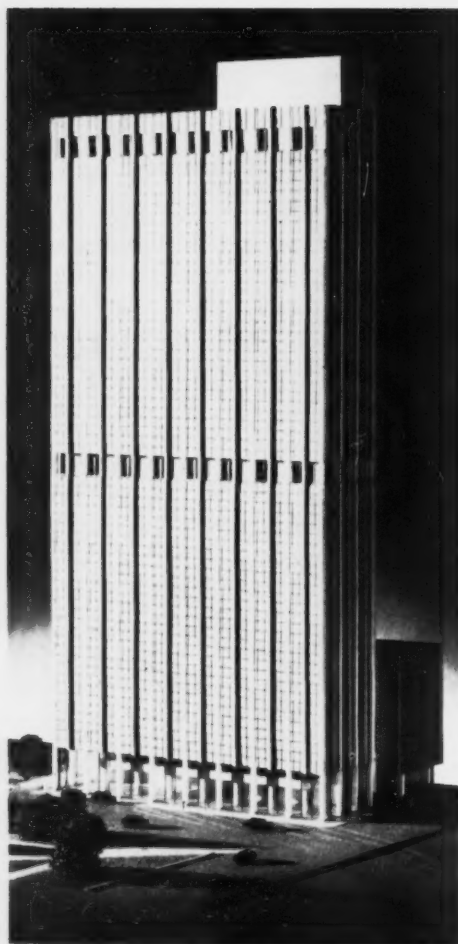
The physical volume of total new construction put-in-place, measured in terms of the seasonally adjusted annual rate in constant 1947-49 dollars, declined 6 per cent from July 1959 to July 1960. Similarly in terms of 1947-49 dollars, total private construction in July 1960 was 5 per cent less than in July 1959 and, for the same periods, total public construction declined by 7 per cent.

The new value put-in-place data for all categories of construction has been revised to include estimates for Alaska and Hawaii beginning with data for January 1959. While this change also affects the comparability of data for periods prior to and after January 1959, the effect on the national totals is negligible, being of the order of one-half of 1 per cent.

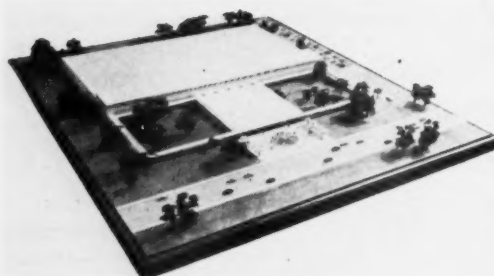
\*Based on "Construction Reports," U. S. Department of Commerce, Washington, D. C.



## A/E NEWS



Plans are announced for the construction of downtown Los Angeles' first 35-story aluminum, glass and marble high-rise office structure and a 14-level electronic parking structure at Sixth and Hill Sts. overlooking Pershing Square. The \$20 million structure, to be known as the 333 West Sixth St. Building, will replace the historic Paramount theater Building and will occupy more than one acre of land for a total area of 615,000 square feet. Features include marble-encased exterior columns outside the floor area and outside vertical aluminum ducts for a periphery air-conditioning system—considered an innovation for the West Coast. Architects: Charles Luckman Associates, Los Angeles.



Recently ground was broken for the construction of the \$3 million industrial facility for Yardley of London, Inc., in Totowa, N.J. The 236,000 square foot facility will house finishing and distribution systems for Yardley Products in the U.S. The steel-framed plant, occupying a 30-acre site, is a white-brick face masonry enclosed structure. Two garden quadrangles will be provided, each surrounded by covered colonnades adjoining administrative offices. Architect: Edward Durell Stone, FAIA.



American Cyanamid Company announced plans for its new Executive and Administrative Center in Passaic County, N.J., which will provide office, cafeteria and parking space for 1,500 employees. The long, low four-story structure will occupy 180 acres on a rolling, wooded site. Each of the 72-foot wide floors will contain 70,000 square feet with an interior central bay service core. Construction will be steel frame with concrete filled steel decking. The long faces of the building are horizontally scored by sculptured spandrel facing of cast stone with exposed aggregate. Architect: Vincent G. Kling, FAIA, Philadelphia; Mechanical and Electrical Consultants: Meyer, Strong and Jones; Structural Engineers: Severud-Elstad-Krueger Associates.



The new County of Alameda Administration Building at Oakland, Calif., will contain approximately 4½ acres of space for executive, fiscal, judicial and other departments. Structural frame will be of reinforced concrete expressed by exposed columns on north and south walls and by a cantilevered floor slab and girder system on east and west walls. Elevators, stairs, restrooms and utility spaces are grouped in an interior central core. Architects Associated, AIA: VanBourgh/Nakamura & Ratcliff and Ratcliff, Berkeley, Calif. Structural Engineer: H. J. Brunnier; Mechanical & Electrical Engineer: George K. Brokaw.

### Visionary architecture

New York's *Museum of Modern Art* announced an exhibition devoted to architecture considered unbuildable for one or both of two reasons: it may have been technologically impossible to realize at the time it was designed, or society lacked a program and purpose to support the architect's convictions. Today, when almost any design seems technologically feasible, the question of *what* to build begins to take precedence over problems of how to build, according to the museum announcement. The exhibition is intended to show what architects themselves would have preferred to build had they been able to persuade society of the soundness of their vision. More than 20 projects, including work by Hans Poelzig, Bruno Taut, Frederick Kiesler, Le Corbusier, and Frank Lloyd Wright, together with other recent European and American examples, illustrate concepts of continuing significance in the development of modern architecture. The exhibit, to be shown from September 28 through November 27, is under the direction of Arthur Drexler, Director of the Department of Architecture and Design.

### FLW/USIA exhibit in Milan

Europeans were shown some of the achievements of one of America's foremost architects—the late Frank Lloyd Wright—when the U. S. Information agency opened its exhibit at the Milan Triennale. The exhibit, "Frank Lloyd Wright in the 1950's—Man Over Machine" was the official U. S. government entry in the three-month event, which features the latest architectural accomplishments and industrial designs of many countries.

The USIA exhibit, designed by Paul Grotz and Walter McQuade of New York City, was created to bring Europeans up to date on major Wright buildings erected since the last large Wright exhibition in Florence in 1951. It features models of Wright buildings, photographic murals, and such objects as Wright's personal drawing table, furniture, and replicas of original drawings.

### BRI fall conferences

Featuring a research correlation conference on "Preassembled Components" in modern building, the *Building Research Institute* will stage its 1960 Fall Conference at Washington, D. C.'s Shoreham Hotel, November 15-17. Developed under the chairmanship of Leon Chatelain, Jr., FAIA, Chatelain, Gauger & Nolan, Washington architects, the three-day session will

also include a conference on "Structural Foams," a conference-workshop on "Fasteners and Anchorage Devices for Industrial Curtain Walls," and a conference on Building Research developed by BRI's Research Committee.

Open to the interested public as well as to BRI members and guests, the three-day meeting is the third in the newly inaugurated series of BRI semi-annual, multi-subject conferences. Previous two have drawn as many as 900 people from all fields of building and associated professions. The Institute, is a unit of the Division of Engineering and Industrial Research of the National Academy of Sciences—National Research Council. Information about registration or further details about the conference may be obtained from Harold Horowitz, Assistant Director for Technical Programs, Building Research Institute, 2101 Constitution Ave., Washington, D. C.

#### West coast report

Architects favor proposed revisions for additions to present building codes which are intended to permit greater design initiative, it was announced recently by the *Southern California Chapter of The American Institute of Architects* after results of a poll were compiled. The chapter circulated a mail questionnaire among its 680 members to determine prevailing attitudes on this issue of civic importance. Attached to the questionnaire was a copy of proposed provisions which a citizen's non-profit association, the Council for Better Buildings, drafted for consideration as an amendment to the Los Angeles Building Code.

The provisions related to a code section on new methods and materials of construction. Essence of the proposal is that a building permit would not be denied "on the ground that plans and specifications provide any material or method of construction not specifically prescribed by the Code, when the architect or professional engineer in responsible charge of the design files with the department a written Certification of Approval." Included in the signed statement recommended are six qualifications which are enumerated. Only architects and professional engineers who are certified to practice by the state of California qualify.

In reporting on the survey results, A. Quincy Jones, FAIA, chapter president, and Raymond Ziegler, AIA, chapter chairman on the Building Code committee, said that the poll reflects

(Continued on page 8)



**EASIER REMODELING WITH COPPER TUBE.** *Overhead work is easier* — no threading, no caulking and a copper tube installation weighs only one fourth as much as one of ferrous piping. *Saves space* — copper tube is trim, solder-joint fittings are compact. *Work is faster* — Anaconda copper tube and fittings for soil, waste and vent lines cut installation time one third to one half. *A better job* — copper tube won't rust: its smooth inside surface resists clogging. For more information and cost comparisons — write: The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.

## ANACONDA

® **COPPER TUBE AND FITTINGS for soil, waste and vent lines**

Available through plumbing wholesalers. Products of The American Brass Company



Longer Lengths—Few Joints



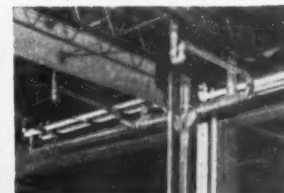
Preassembly—Saves Time



Lightweight Copper—Easier Installation



Compact Connections—Save Space



Circle 103 for further information

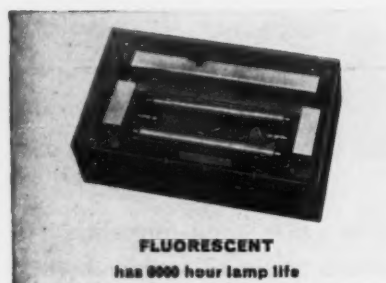
# There is greater value in **Kirlin EXITS** THE COMPLETE LINE

ALL ALUMINUM



AT PRICE OF STEEL

## VARIETY OF MODELS



**FLUORESCENT**  
has 8000 hour lamp life

shock resisting glass  
glow-in-dark glass  
stencilled metal fronts

also available "MEN" — "WOMEN"

EXPLOSION-PROOF EXITS ALSO  
WITH STANDARD 6" LETTERS

Wiring inter-changeable for either  
incandescent or fluorescent lighting

Surface units have luminous bottom



**RECESSED**  
cast aluminum frame



**PENDANT**  
single or double faced



THE STANDARD  
RECESSED FIXTURE

Still leading with these features:

- GlasSurfaced aluminum reflectors
- Spread-type lenses, stay clean
- Largest variety of types and sizes

**The KIRLIN CO.**

In stock at leading electrical jobbers

Underwriters' Laboratory  
and I.B.E.W. labels



**Send for  
new EXIT catalog**

3435 E. JEFFERSON, DETROIT 7, MICH.

## A/E NEWS

(Continued from page 7)

the attitude that the architect has a professional responsibility to the public to perform services in the most effective manner possible. The vote does not reflect a criticism against city or county building and safety departments.

Two world-famed architectural figures are among the speakers announced for the 1960 convention of the *California Council of The American Institute of Architects* by Wayne S. Hertzka, FAIA, president.

Architect Marcel Breuer, FAIA, and Spanish architect-engineer Eduardo Torroja will address the convention, Hertzka said, as well as three other prominent American architects: Philip Will, Jr., FAIA, current president of the Institute; Harwell Hamilton Harris, AIA, of Dallas; and Adrian N. Langius, FAIA, director of the State Building Division in Michigan.

Theme of the California Council's 15th annual convention will be "The Changing Practice of Architecture"—an exploration of the forces which have been acting on the practice of architecture for the last generation and which produced new demands on it and new responses by the profession. Convention dates are from October 20 through the 22nd.

The recently completed 42-story office building for the Southland Life Insurance Co. in Dallas, Texas, planned, designed and engineered by *Welton Becket and Associates* has been awarded the coveted "Office of the Year" award by *Office Management* magazine, according to an announcement by Robert Smith, editor of the national business monthly. The award was made by the publication for having "brilliantly met the four-fold objectives of its owners: to provide efficient home office space, to serve as an income-producing investment, to meet a number of business and community needs, and to set aesthetic and building standards that will influence all subsequent office and hotel building in the American Southwest." The project, constructed at a total cost of \$35 million, includes, in addition to the 42-story office tower which is the tallest west of Chicago, a 28-story, 600-room Sheraton Hotel and parking for 2,500 automobiles as part of a five-level underground complex. Mark Lemmon of Dallas was consulting architect.

(Continued on page 11)

SALES ENGINEERS IN PRINCIPAL CITIES

Circle 104 for further information

Circle 105 for further information about U.S. RUBBER →  
**Architectural & Engineering News**



# Translucent Ceilings and Panels of new **TROPICEL** bring

**new freedom to your planning . . .  
new beauty to your buildings**



Natural light is ideal light . . . bright, abundant, cost-free. And now natural light can be used more freely, more imaginatively than ever before.

New TROPICEL — made of two tough, hard plastic sheets integrally bonded to one of several strong, decorative core materials — allow you not only to control light intensity, but to give it a unique three dimensional beauty, with color and pattern of your choice.

Here are a few of the unique advantages new TROPICEL offers:

- any color effect, from milky white to most delicate shades of the rainbow . . . in solid tones or multi-colored patterns

- excellent thermal insulation, to prevent expensive heat loss, to shield against a strong summer sun
- exceptional structural strength, unusual in the field of fenestration
- outstanding toughness, to withstand even hurricane winds and hurled debris
- extreme light weight, particularly in relation to its strength.

These few representative installations give but a glimpse of the possibilities this new material offers . . . possibilities you yourself will be the first to recognize. To learn more about TROPICEL, write to the address below for name of nearest distributor.



## **United States Rubber**

### **Naugatuck Chemical Division**

Dept. A Elm Street  
Naugatuck, Connecticut

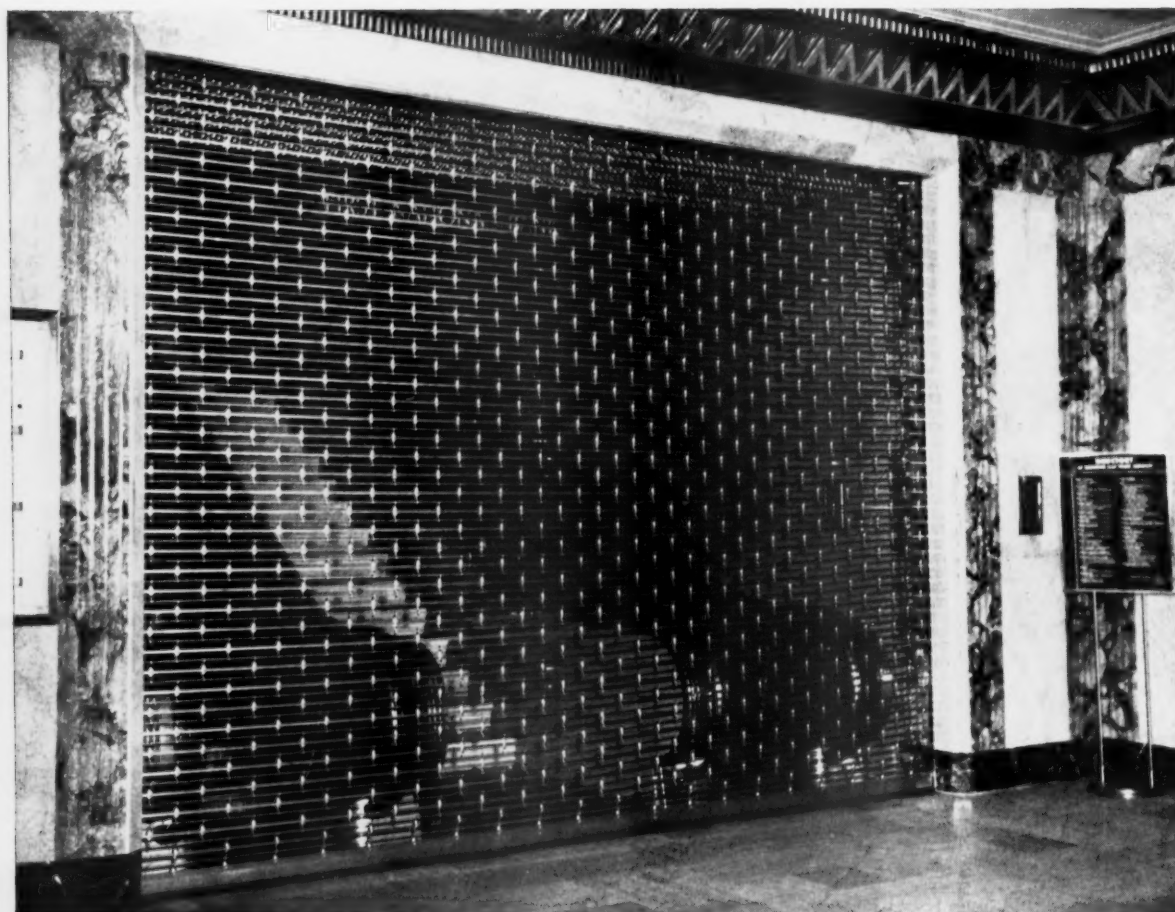
Rubber Chemicals • Synthetic Rubber • Plastics • Agricultural Chemicals • Reclaimed Rubber • Latexes

**DIST. OFFICES:** Akron • Boston • Gastonia • Chicago • Los Angeles • Memphis • New York • Phila.

**CANADA:** Naugatuck Chemicals, Elmira, Ont. • **CABLE:** Rubexport, N.Y.



Light and airy as a butterfly in appearance  
...yet they give "ROLLING STEEL DOOR" protection



GOLD ANODIZED ROLLING GRILLE IN FIRST NATIONAL BANK • ST. PAUL, MINN. ARCHITECTS: ELLERBE & CO.

**Cornell Butterfly Rolling Metal Grilles for Schools, Banks, Museums, Air Terminals and other buildings where protection is necessary and good design desirable.**

Rolled up, they are out of sight. Rolled down, they are a positive and attractive barrier against entry.

Widely used to protect counter openings and to partition school corridors without obstructing light, air and vision.

Exclusive Butterfly Design Grilles can be furnished in stainless or galvanized steel, bronze, and in silvery satin or color anodized aluminum. Great design possibilities.

Manual or motor operation.

**CORNELL IRON WORKS, INC.**

ESTABLISHED 1828

36th Avenue and 13th Street, Long Island City 6, N. Y.

REPRESENTATIVES IN ALL PRINCIPAL CITIES

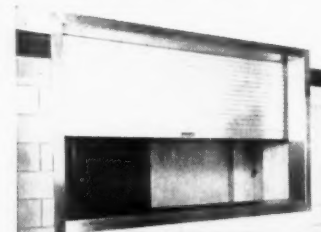


Circle 106 for further information

10



ROLLING STEEL DOORS



1 1/4" FLATSLAT ROLLING SHUTTER

## A/E NEWS

(Continued from page 8)

### CEC/AISC/NSPE news

A research conference and three sessions on professional matters will supplement a well-rounded technical program for the annual convention of the *American Society of Civil Engineers*, to be held in Boston, Mass., October 10-14.

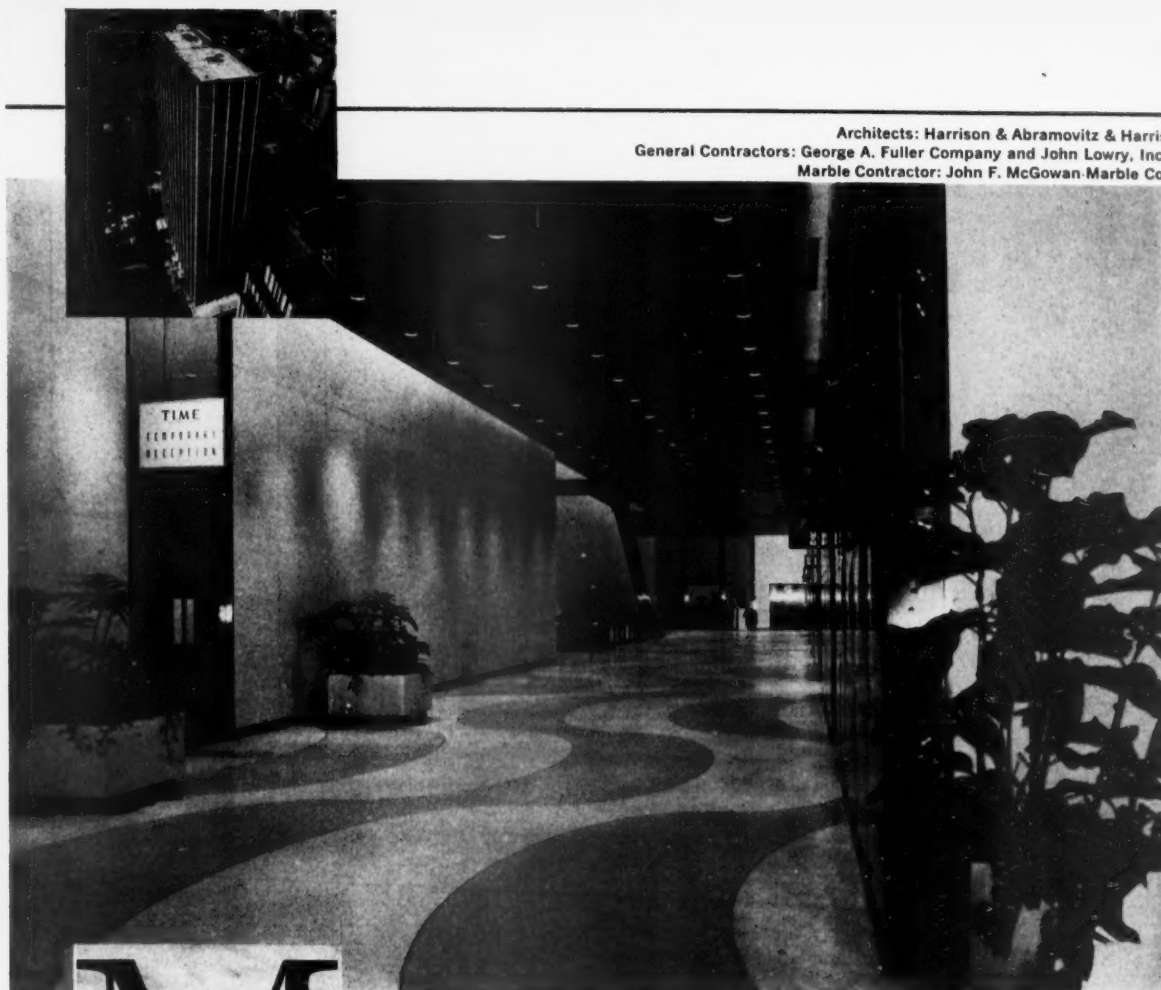
More than 2,000 are expected to register for the convention. Most of the sessions are scheduled to be held in the Hotel Statler-Hilton, designated as convention headquarters. Thirty-nine technical sessions have been programmed at which a total of 146 technical papers will be presented. In addition, there will be three panel discussion programs. Four joint division sessions are planned.

Widespread rebuttals to *Reader's Digest Magazine* attacks on the Federal use of consultants have been given both by the *Consulting Engineers Council* and by the *National Society of Professional Engineers*. The NSPE reports "with the sweeping charges of 'mismanagement' in the 'extravagant use of private engineering consultants' on the Interstate Highway Program, a July *Reader's Digest* article entitled 'Our Great Big Highway Bungle' has added fuel to the fire started by recent attempts to discredit the Federal-aid road program." The story written by Karl Detzer, has drawn a quick reply from Paul H. Robbins, P.E., executive director of NSPE.

"Following the line adopted by the General Accounting Office in previous attacks, Detzer calls the use of consultants on the Federal road program a 'violation of Federal policy,' and implies that low ethical standards on the part of consultants have resulted in the overelaborate design of portions of the highway network."

In his reply, Robbins points out that Bureau of Public Roads Regulations, backed by the 1958 Highway Act, authorize the use of private consultants and call for the fullest possible use of small business enterprises in the construction of the interstate highway system.

In answer to charges that consultants are guilty of overdesigning roads to increase fees, Robbins stated that most highway engineers prefer not to operate under per-cent-of-construction contracts, and expressed strong resentment to implications that the ethics of the profession mean little to the average engineer.



Architects: Harrison & Abramovitz & Harris  
General Contractors: George A. Fuller Company and John Lowry, Inc.  
Marble Contractor: John F. McGowan-Marble Co.

# MARBLE...here's how it saves money in commercial buildings

Marble's beauty alone may be justification enough for its use in commercial buildings, but the economy it affords is considered equally important by many architects.

Such is the case with Rockefeller Center's new 48 story Time & Life Building. Here Vermarco statuary marble lends striking beauty to outstanding design at an initial cost only slightly greater than that for less attractive and less durable materials. And Vermarco marble will more than make up for its additional cost, because it will require remarkably little maintenance as it continues to endow this building with distinctive beauty.

Vermarco marble offers you this same combination of lasting beauty and economy. Write today for illustrated literature.

**VERMONT MARBLE CO.**  
PROCTOR • VERMONT

SALES OFFICES: BOSTON, CHICAGO, CLEVELAND, DALLAS, DETROIT; DETROIT MARBLE CO., HOUSTON, KNOXVILLE; GRAY KNOX MARBLE CO., PHILADELPHIA, LOS ANGELES, NEW YORK, SAN FRANCISCO, WASHINGTON, D. C. • IN CANADA: ONTARIO MARBLE COMPANY, LIMITED, TORONTO AND PETERBOROUGH, ONTARIO; CONTINENTAL MARBLE CO., LTD., VANCOUVER, B. C.

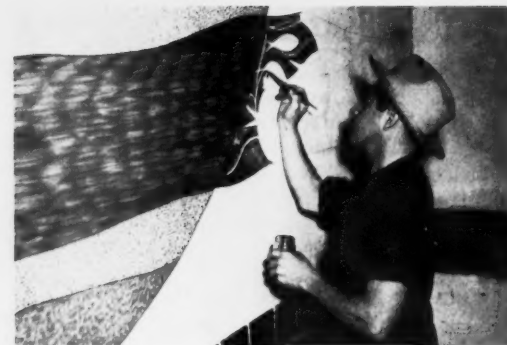


Circle 107 for further information





"SPACE MAGIC"—Tempera—Courtesy of the artist—Seymour Fogel



*By Seymour Fogel (seen above applying ethyl silicate on a mural detail). He discusses various problems associated with the architect's integration of mural work in any part of a building program. The use of ethyl silicate as an art medium is reviewed as having great potentialities for architectural application. Mr. Fogel, a vice-president of the Architectural League of New York and a past member, Executive Board of the International Fine Arts Council, is widely known for his mural commissions, numerous awards and his many one-man and general exhibitions. He is represented in the permanent collections of the Houston Museum of Fine Arts and the Dallas Museum of Fine Arts in Texas and the Metropolitan Museum of Art in New York.*

## Ethyl Silicate and Architecture

**THE NEED:** The uncertainties involved in working with materials and concepts not quite understood makes many an architect do without the painter's services, and to fall back upon outworn clichés. Further, the mechanics of incorporating the financing of mural work, and the lack of recent precedent in the real working together of the arts of architecture cause many to choose the path of least resistance.

On the assumption that most of this rejection comes from men of good will, some clarifying information can be useful. At least, the point of view of a painter is not often heard. Therefore, it is the author's purpose to touch upon these problems, and some others, in relation to painting and architecture. **THE COST FACTOR:** This is generally a straw man. The cost of painting and sculpture, as against the total cost of a project, is minute. Almost all mural art will fall between \$25 and \$45 a square foot—up or down—depending upon the size, complexity, and peculiarities of each job. This cost ratio can be lowered against the total job by proper inception and thought.

**WHAT IT BUYS:** If the cost is a little more than marble, wood or aluminum, it more than pays its way. It buys real architectural resolution, good design, human communication on a personal and community level, public relations and publicity. The various veneers are far from inexpensive; and they merely cover a wall and contribute very little. **THE MEDIA:** Among the arguments raised against painting for architecture is lack of durability and



the question of maintenance. This is absurd when one considers mosaic, tile, fused glass, ethyl silicate, baked enamel, etc.—all completely permanent and architecturally sympathetic.

Let's take ethyl silicate as an illustration—a non-fading, brilliant, matte, translucent means of applying color to a wall. It has great projection, is permanent outdoors and indoors, has the entire range of color as a palette, and is completely proven by test. On any structural wall—concrete, cinder block, hollow tile, brick, metal lathe—a thin mortar of white Portland cement and white marble dust is laid. The color is painted in water color consistency. An instantaneous bond with the wall is formed, and the pigment is imprisoned in a hard coat of pure silica. The finished wall has great beauty, a beautiful mica sparkle, and requires no upkeep.

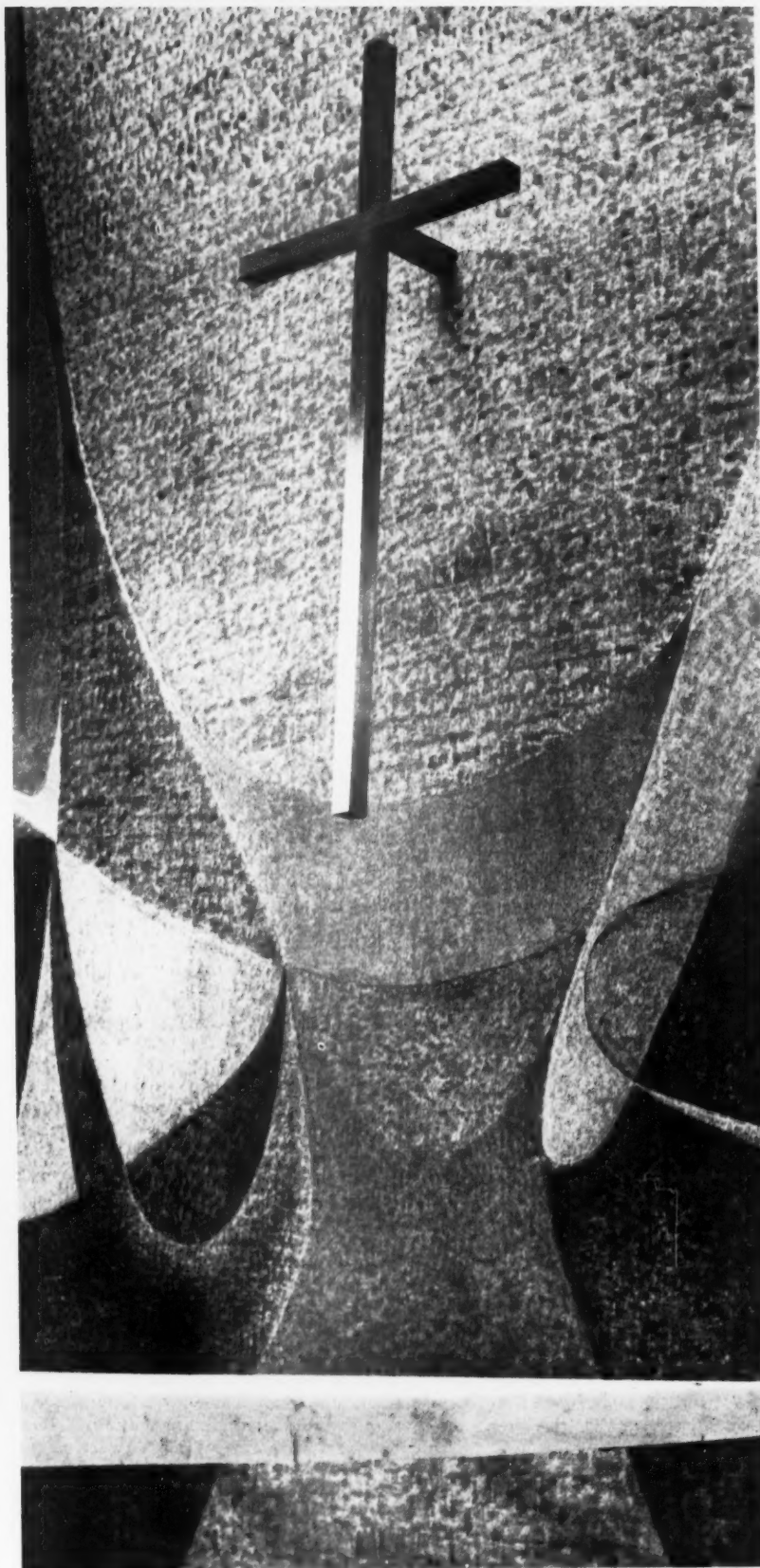
**THE PAINTER'S RESPONSIBILITY:** A painter is generally responsible in any commission for the materials required to bring it to fulfillment. For example, in ethyl silicate he is responsible for the cost and labor of the mortar application, his design and working drawings, scaffolding and whatever insurance is necessary. He must also take into account sub-contractors' needs in time and space and work out equitable arrangements with them. He has to respect union conditions on the job, and all the regular factors of discipline on the job site.

**OTHER CONSIDERATIONS:** One of the most continuously absorbing problems in architecture is the function and character of the wall and its surface. This is aside from its prime purpose as a means of enclosure and space definition.

When properly conceived, a mural wall avoids the pitfall of the painted surface, or that pasted quality of veneers. It grows naturally with, and because of, its surroundings. Its therapeutic, spiritual and psychological impact upon the mind and eye are too well known to document here. Suffice it to say, these qualities so inherent in the very nature of painting are a much needed humanizing factor.

**IMPLEMENTATION:** If any point has been made here, it would be well to touch its implementation. Intelligent and early consultation between architect, client and painter is a must. This should cover, among other things, building usage, traffic problems, visibility factors, space control, lighting, aesthetics, etc. A design submission can be facilitated by a contract with a small percentage of the total allocated for the submission of the design—many set in a scale model. A contingent clause can abrogate the balance of the contract in the event of total rejection of the design concept.

If this approach seems slightly more troublesome than simply opening a Sweet's catalog for a quick solution, the results are more than worth it.



A mural in ethyl silicate for the Phillips Chapel of the Brooklyn, N.Y., Methodist Hospital (1959) is shown at top left. A detail from this mural is seen directly above. Artist: Seymour Fogel. Architects: Rogers and Butler, N. Y.



## interior design and the architect

by Eleanor Pepper

*Eleanor Pepper authoritatively presents various aspects of the problems associated with the successful design of interiors—ranging from the professional criteria involved to a case study of hospital interiors. Highly qualified, Miss Pepper has been associated with the design of all types of buildings in many parts of the world. An architect by training, B.S. in Architecture, Massachusetts Institute of Technology, Miss Pepper also received a B.A. from Barnard College and also pursued graduate study at the Institute of Art, Sorbonne, University of Paris. She has been in private practice as a design consultant for the past ten years, in addition to serving as Professor and Chairman of the Department of Interior Design at Pratt Institute, Brooklyn, N.Y. Her professional activities include editing and lecturing on interior design. Of many professional affiliations held, she includes Associate Member of the New York Chapter of The American Institute of Architects.*

The needs of this age differ, in almost every field of endeavor, from the needs of previous eras. That is one of the reasons why a new architecture has come into being during the past fifty years.

This new architecture is continuously experimenting—for architects are experimenting in the needs of buildings—in what architecture can do for society, as well as in new building techniques.

While this new era in architecture is based on underlying principles that are universal, such as functional planning and the logical and economical use of materials and techniques, the results may be widely varied in order to express individual needs and tastes.

In order to arrive at a successful solution to the problem, today's architect designs in collaboration with a structural, mechanical or electrical engineer, to ensure a safe and secure structure. He works with artists and craftsmen to create greater beauty for his buildings. He works with the landscape architect to make the surroundings of his buildings attractive, and he also works with the city planner to make for a good neighborhood environment and healthful living spaces.

One of the architect's most important collaborators is the interior designer. In the past the architect has been reluctant to subdivide his professional areas by engaging the services of a specialist in interior design. In many cases, interior design was not considered until the building reached final completion. The architect's experience has taught him, that he has abrogated a significant function by neglecting this aspect of his structures—often because he felt it was too time-consuming or perhaps demeaning to his status to be concerned with the elements that constitute the total work of interior design. As a consequence, a new profession has appeared on the horizon in recent years to fill the void—the profession of the interior designer. This new specialization is gaining recognition as being of utmost importance in the development of the building concept by both the architect and the client.

Many architects recognize the value of the interior designer's services as necessary to bring to fruition the ideas of all concerned with and interested in achieving the most favorable conditions in the completed building. Many architects, depending on the size of their firm, have a full-time staff which is specifically charged with this responsibility. Other practitioners often find that they must seek the services of competent consultants with whom they can collaborate in order that the entire structure and building program—both in its interior and exterior aspects may be realized as an integrated whole.

Greater emphasis is being placed upon giving more careful thought to the problems of interiors at the earliest planning stages of a project. This principle applies to all types of buildings: residences, institutions, civic buildings, commercial structures, buildings of almost any imaginable kind.

Often the individual architect, busy person that he is, recognizes the need for the specialized services of an interior designer. We are all aware of the time-honored prejudices (quite often justified) of the architect wherein he may be loathe to engage the services of an interior designer. Often he is frustrated in finding that individual consultant who will correspond with and satisfy his professional requirements. What then are some of the criteria for selecting an interior designer—either as a staff member or as a consultant?

### Professional criteria

Since the end of World War II, great advances and spectacular achievements in the sciences, in industry, and in commerce, have generated a new type of corporate client and subsequently many new types of building programs calling for diverse talents.

To imaginatively and competently solve the diverse problems that such building programs represent, the designer of today's interiors must be trained in many areas—in the arts and sciences of building, in economics and sociology, in the fine arts and crafts associated with architecture. He must be able to understand the architect's program, identify with the building concept, and be capable of coordinating his activity with that of the architect in studying the needs of the people using the building and to plan with the architect, the relationships of the sub-divided architectural spaces.

One expects the interior designer to be a cultivated, intelligent, and responsible human being who places his professional responsibilities above his personal interests in solving the building program requirements for the client. He must be capable of grasping the problems assigned to him in over-all perspective and must be sufficiently technically trained and skilled to solve the problem and translate it into three-dimensional space. Stress is placed on an "over-all" view of the designer's solution since he must always conceive of his work as an integrated part of a larger building complex.

In the author's view, it is not enough just to merely be able to place a series of objects in pleasant juxtaposition and harmonious assembly. The interior designer must actively assist in developing a whole architectural unit.

The successful development of an interior demands a conscientious attitude toward the *art and technique of living*. He must be able to assist the architect in providing people with places in which they will be happy to live or work or perform other duties and gain meaningful pleasure from the daily routine of their lives.

Consequently, the professional orientation of the designer of interiors must be humanist in its outlook and in his research and in his final evaluation of his results. In the writer's view, a new emphasis is being placed on selecting the individual who is *not* seeking a mere mode of self-expression. He must be a researcher, an analyzer, and a synthesizer of a sound solution. The person who can fulfill the problems posed by today's architectural interiors will *not* be the decorator who follows merely the quixotic and ephemeral whims of the fashionable moment that may completely obscure or obliterate the basic meaning of the architect's design. Rather, one looks to the interior designer, who has been trained in basic principles, not only in the field of color, furniture design, and other related arts—but also to an individual who has been taught the fundamentals of planning, of structure, and of the mechanical requirements of buildings. He is not an architect or an engineer, but he must comprehend the problems of the other professionals who are working on the building.

This designer must understand the complexities of structure, the limitations imposed by concrete, steel and mechanical equipment, so that he may suggest ideas that can be achieved within the framework designed by the architect. Such a person can be of help to the architect and the client if he is aware of the impact of the dynamics of living, new mate-



rials and innovations which are complicating the job of designing a building today. I have attempted to briefly present some of the criteria that appear important in selecting a staff assistant or a consultant in interior design.

#### Planning of interiors

The architect should concern himself with the interiors from the very outset of the building program. They should evolve along with other aspects of the building and not be forced into the architectural space as an afterthought.

Strange as it may seem, many architects do not evolve their structures from *within*. They do not start with the human being and human use of the space as the module. Of course, the able practitioner does conceive of his space in three-dimensions—but three-dimensional thinking is not equal to a *flow-diagram*. The spaces should be conceived in terms of "stopping" places as well. The human being is either in *movement* or *repose*. He must stop to perform certain tasks: he sits at his desk to work, at his table to eat, at his school seat to learn.

The proper placement of furniture and related interior furnishing should not be ignored from the earliest studies. Serious attention should be paid to the vistas provided from the spaces allocated for seating or other functions. Therefore, space must be thought of as being both three-dimensional and two-dimensional in composition.

For example, often a secretarial desk is placed lengthwise against a wall. If that person is forced to look at a solid area two or three feet from the end of her nose, she will become restless and inefficient. The hospital patient forced to look at a wall, ugly in its design as a two-dimensional composition will also become restless and irritated. Thus, when furniture is forced into a certain arrangement, because of the demands of space, the pictorial composition of the focal points must be well-considered.

It is useful, of course, to make various space allocation diagrams at the very outset, but they do not indicate the complete planning for each area. With these diagrams, the architect can go forward and carefully plan every room, study every area and every design element and detail.

Furniture and equipment layouts provided at the time of the preparation of the early architectural plans help to clarify everyone's thinking and they present to the client a more comprehensive picture.

They are useful in determining what structural changes may be necessary and they can be made without any difficulty at this early stage of planning. Successful and pleasant use of interior space may sometimes be balked by the awkward placement or exposure of structural members. It is much easier to remove a column with an eraser while it is still on sketch paper, than it is at any later date in the building program.

#### Furniture layouts

No building should be designed without placing the furniture on the preliminary plan to see if all the necessary items will fit properly into place. It is always important to the human comfort factor—the "livability" of spaces. Nothing lowers morale and efficiency more than dull, unattractive surroundings.

The writer stresses this factor of furniture layout based on experience that ranges from handling the problems of residences to those of the interiors of the early United Nations buildings.

For example, this writer has encountered plans where it has been impossible to get a proper sized

(Continued on page 16)

# TOTAL PRODUCT SATISFACTION



## MACOMBER ALLSPANS set new standards for comparison

Throughout the building industry, Macomber ALLSPANS are synonymous with structural quality—erection economy. No other structural framing member gives the **architect** such comprehensive design and planning data. In no other open-web framing does the **engineer** work with such tested reserve strength, unencumbered by waste weight. And, this high-strength nailable framing brings the **contractor** over-all erection economies otherwise unobtainable.

Your local Macomber Sales Representative can cite instances—explain why—Macomber ALLSPANS deliver total product satisfaction. Call him today!

Get your next job scheduled early.  
Mail coupon for full information.

#### NEW DESIGN MANUAL

Exclusive structural and economy advantages  
... exact information for framing 8 to 120 feet.

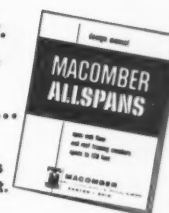
NAME.....

COMPANY..... POSITION.....

ADDRESS.....

CITY..... STATE.....

AEN 2-60A



## MACOMBER

CANTON 1, OHIO

ALLSPANS • V-LOK • V-BEAMS • V-GIRDERS  
BOWSTRING TRUSSES • ROOF DECK • STRUCTURAL STEEL

SEE OUR  
CATALOG IN  
SWEET'S  
OR WRITE  
FOR COPY

Circle 108 for further information

## INTERIOR DESIGN

(Continued from page 15)

bed into the bedroom or a conveniently sized dining table into the dining area. In one hospital project the partition wall of a cafeteria was originally designed as an ordinary metal and glass office partition—itsself a dead, dull, uninteresting and unlovely object. We had to fight to change this. We did so because it seemed necessary since the dining room of the hospital was the one place that the doctors, nurses and staff gathered at meal time for relaxation and a change of pace. The need for this area to look completely different from office spaces and other hospital areas was of prime importance. The architect's specifications demanded office partitions, but interest in aesthetics, and the morale of the personnel demanded more than this.

In studies made for the early United Nations buildings (Hunter College and Lake Success), the furniture layouts immediately showed both architect and client alike what changes were needed to be incorporated into the plans in order to make the rooms more useful and efficient. In many buildings a mere door-swing made an office function better. The re-designing of a heating or ventilating unit may provide a handsomer window treatment. Appearance need not be sacrificed to meet functional requirements or those of mechanical equipment requirements.

### Finishing materials, character, maintenance

Of course, though the first step in designing an interior is to deal with the arrangement of the furniture, so that its pattern becomes functional and pleasing, the imaginative handling of materials, color and details will add immeasurably to its zest and gracefulness.

This brings us to another important aspect of a building that should be considered very early in its design—that is the *finishing materials*.

Think of all the materials that go into a building—wood and stone, brick and terra-cotta, metals, tile, rubber, plastics, many mutations and many variations of all of these—too numerous to mention.

Here again, the architect with the help of the interior designer will be able to concentrate on a group of materials suitable to each particular project, so that as much as possible will be known about the finished appearance of the building, before the specifications are written.

For the modern building, the selection of finishing materials is most important. With the disappearance of much wall ornamentation that may have been appropriate in a period room, it is now necessary to achieve surface interest by the textures of the structural materials incorporated into the building. Brick, stone, metal, wood and other materials are all used in an effort to achieve richness.

Finishing material schedules and color schemes for the entire building should be worked up as soon as possible, so that there will be an opportunity of getting all the materials together, whether structural or decorative and with these, the fabrics, furniture, etc., so that an over-all study may be made of the building long before it has reached the finishing stage.

Though the finishing materials must be related to the structural design, they should also be related to the general interior aspect of the building, and its furnishings.

The building must be thought of as *space in use*, not as space in vacuum. We must think of who will

use the space, how they will use the space and therefore what appearance should be given to the space.

If a rugged, rustic appearance is planned for the interior, rough, heavily textured materials may be selected, but if on the other hand a very slick interior is desired, smooth, rich, polished surfaces will be specified.

Whatever the type of interior, the finishing materials and the furnishings should be thought of as part of the same whole.

Color schemes should be developed for all these finishing materials along with the studies for the furnishings and fabrics. In this way a building is achieved that is well coordinated in its color harmonies and that will reflect the tastes and preferences of the architect and owner.

In addition to the appearance and color of the finishing materials, we must also think of the *practicality* of the materials selected. Will they be easy to maintain? Are they suitable to the spaces in which they are to be used? This is a most important factor to consider—maintenance.

I would like to cite an example of a college building in which open pore stone walls were used in the lobby. In my opinion, the light color and open pore material is disastrous in this location. Students leaning against walls, sitting on benches against walls, leave oily, dirty marks that are impossible to remove. Soon, a beautiful building, such as this one, will leave an ugly impression because the first view upon entering it, is of stains and untidiness. This will not be a sign of bad housekeeping, but rather one of the specifications of a material that was impossible for the housekeeper to keep clean.

### Flooring materials

A few points should be made about the use of flooring materials, especially the resilient type. The first cost should not always be the only one to be considered. The maintenance factor of some may be much more costly in the long run. Colors also are very important in the problem of the ease of maintenance. Medium or light colors show dust and foot marks so much less than the darker tones. Careful attention should also be given to color selection because of its importance in light reflection. The use of a specific color may have an important effect on the cost of the lighting equipment to be used in a building.

### Hospital case study

I would like to cite in depth for this discussion the over-all problems of interiors for a hospital building. I have taken this example because it typifies many of the problems of interior finishing associated with other commercial and institutional structures.

The materials used must be considered from the physical and psychological point of view because we are designing (as stated before) for human welfare. The hospital environment is most important because it must be one to enhance recovery. A good working plan is naturally essential to a good building, but equally important is the psychological and emotional ease of the patient. What he sees in looking about him must be conducive to peace of mind, quiet and privacy. And what he sees are your finishing materials, not the strong steel frame, or the fine brass tubing or the copper wire, but rather the tile and the paint, the vinyl and the rubber, the wood and the metal.

So let us use these materials with sensitivity and imagination and regard for the patient's situation. The creative approach means that we must consider

the atmosphere of living that we are developing for the finished appearance. For this atmosphere, this character we give to our buildings will have an effect on the happiness of all who inhabit the hospital whether as patient or as staff member.

### Lobby treatment

The occasions that bring one to a hospital are usually attended with some degree of uneasiness, so the impression gained on entering the lobby or reception room always seems to me to be of considerable importance. Shall we have "marble halls" that can only make us think of stony hearts? The cold, unwelcoming, monumental lobby that we quite often see seems to me to be a mistake. Here at the entrance is a place for warmth, humanity, friendliness. The lobby should be dignified looking, but not impressive in a heavy-handed or over-scaled way. A judicious use of color to stimulate rather than depress should be made. Wood, paint, carpet, good-looking furniture—all can add up to an attractive picture. And the lobby is a wonderful place for art work of some kind—sculpture, murals, whether painted or of tile, mosaic or metal.

### Use of art

At this point, mention should be made of plaques, donors and dedicatory plaques—memorial plaques of all kinds. Because in a way these are finishing materials—they can cover and finish up in the worst way large areas of your building, if you do not plan a distinctive way to solve this problem. Some type of art work can be used as a substitute for these plaques.

Art work should be planned for the building from the very outset of the job. For art performs a very useful function both for the patient and the visitor as well as for the hospital staff. Painting and sculpture in lobbies and public areas stir the interest of visitors and thereby possible donors. Pictures in the bedrooms create a less institutional atmosphere and help give the patient a sense of individuality.

Working areas will be more colorful and corridors will seem shorter and less tiring to the nurse if the long walls are relieved with paintings.

But whatever the reason for using the work of art, be it purely a decorative and ornamental one, a therapeutic reason, or a purely business reason, let us be glad it is there—if it is good art.

### Corridors

But let us get back to what we properly think of as finishing materials. Let us leave the lobby and go down a corridor. While the floors of the lobby might have been of terrazzo, or perhaps carpet-covered, the floors of the corridors will probably be of a more resilient and less noisy type—vinyl or vinyl-asbestos. Both types come in a wide range of colors. A medium value color with some slight patterning or marbleizing, would be suitable for the corridors. This would insure sufficient light-reflectance but the marbleizing would help to conceal scuff marks in between cleanings.

Borders, in general, should be omitted from all tile floors. In rooms whose design seems to call for a pattern, more imaginative things can be done by not using a border.

For the walls of corridors, naturally, many types of materials have been used. Easiest to maintain are structural glazed tile or ceramic facing tile; but again these materials, while fine for heavy duty corridors and of course in kitchens, operating rooms, utility rooms, etc., seem to me to have a cold, unsympathetic and also noisy quality that I would like



to eliminate from patient corridors.

Rubber has been used for wall coverings, but not too handsomely. It reacts badly to some cleaning agents. The new vinyl coated fabrics in a heavy grade are easily cleaned and usually will be of sufficient protection to the corridor walls. Carrying the fabric from wall to ceiling is also advisable. Cutting the wall in half at wainscot height is not attractive and also presents problems. Dirt marks from hands and shoulders usually come above the wainscot height. If a molding is used to cap the joint between fabric and plaster, this forms a long, unelegant line all the way down the corridor. If no molding is used there is always the danger of people picking away at the top of the fabric and loosening it from the wall. If a high wainscot is used, there is not much sense in leaving a narrow bit of plaster to patch and repaint year after year. It seems, all in all, to be more sensible to cover the wall all the way up to the ceiling, and thereby achieve a better, more unified appearance. This also applies to tile wainscot. Run the material to the ceiling if possible. Some places have used sprayed-on vinyl which solves the problem of seams, but poses another problem of difficult repair work if the coat is scratched or torn.

It is advisable that a medium value neutral wall color be selected for the corridors, so that the rooms opening off them will all look well no matter what their particular color. But do try to get variety and interest in the corridors by using accent colors here and there of bright hue and great intensity. The end wall may be made a brilliant turquoise, or green, or terra cotta red or burnt orange. These colors might be repeated at the nurses' stations or at the elevator doors. This use of accents serves also to draw the ends of the corridors nearer, a pleasant thought for the nurse who runs up and down them.

Another preference of mine is the use of alternate colors on the different floors, or the use of a different accent color on each floor. This serves to differentiate between the floors, the services, and adds just a bit to the gaiety of the buildings.

Ceilings, in corridors, especially, should be of an acoustic material with a smooth surface, pleasant in appearance and easy to clean.

Suppose now we go into the patient rooms. What should we find? It is hard to make a hospital room look like home, but let us aim in that direction. The size of the room, first of all may be rather small and tight quarters for all using it. But minimum size can be comfortable or uncomfortable depending on the layout, the relationship of the windows and doors to the wall areas, the placement of the closets and the lavatory and other details.

The first thing I would like to suggest is simplifications of the materials, furnishings, and equipment used in the rooms.

Get as many items built-in as possible: wardrobe lockers, chests, etc. For inches of free floor space count a great deal. The whole room will be neater and easier to keep clean.

Don't get too many materials, textures, colors into one room. I feel that too many colors and textures make not an interesting room, but a restless one. The room should be relaxing and soothing but need not be monotonous. A soft background color will achieve this effect with stronger color at some focal point like a drapery, which is usually the first thing one notices upon entering the room. Bright color in

(Continued on page 18)

# TUFCOR®

gives you all these advantages in one roof system

**SIMPLIFIED SYSTEM.** Lay Tufcor steel sheets... place insulating concrete... apply built-up roof.

**FIRE RESISTANT.** No combustible materials—steel and concrete. Exposed deck has UL fire-resistant rating. Saves on insurance and sprinkler cost.

**STRONG STRUCTURALLY.** Tufcor is made of tough-temper steel... increases safety factor. Deck system functions as diaphragm... stiffens roof framing.

**VAPOR BARRIER.** Tufcor system prevents penetration of warm, moist air. Insulating concrete stays dry and effective. Reduces heating

costs. Rated 0.4 perms by test.

**LIGHTWEIGHT.** Tufcor system weighs 4 to 6 psf less than most types of roof construction, saves framing costs.

**PERMANENT.** Tufcor's generous galvanized coating assures longer life. No maintenance. Inert insulating concrete won't deteriorate.

**EASY TO INSTALL.** Rigid Tufcor sheets are easy to handle; weld quickly in place. Insulating concrete can be placed as fast as Tufcor.

**ECONOMICAL.** Tufcor is one of the most economical roof systems available today.



Corruform®  
Cofar®  
E/R Cofar  
Roof Deck  
Utility Deck  
Vin-Cor  
Structur-Acoustic  
Stay-In-Place Bridge Forms  
Guard Rail  
Pavement Joints



## CLIP AND MAIL COUPON FOR 12-PAGE TUFCOR MANUAL

Mail to: **GRANCO STEEL PRODUCTS CO.**  
6506 N. Broadway, Dept. AE-609, St. Louis 15, Mo.  
A Subsidiary of GRANITE CITY STEEL CO.

NAME \_\_\_\_\_  
FIRM \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

Includes complete Tufcor description, product uses, advantages, selection data. Photos, drawings, charts show Tufcor application plus roof and wall details. Physical properties, available attachments, suggested specifications also covered.



Circle 109 for further information



## INTERIOR DESIGN

(Continued from page 17)

other small areas such as the upholstery fabrics will add enough interest to keep the patient confined to bed from getting tired of his surroundings.

I used to feel that colored cubicle curtains were necessary. Now I am beginning to change and have about decided that white would be better with all the other colors in the room. The freshness of the white makes all the other colors sparkle and does not add another competing color, but rather simplifies a scheme.

A word about curtains and an experience I have just had. Metal and glass are prevalent in today's exterior walls with no sill at the windows making the use of floor length curtains necessary. These curtains are both expensive and unsanitary. Build some form of sill to act as a curtain stop and perhaps to serve as a shelf to take the ever present vases of flowers. Sills may be of stainless steel, aluminum or a hard stone. Just another word about windows while I am on the subject. I know most hospitals are built today with windows right across the end of the room from wall to wall.

This may give as much light as possible, but very often more glare, so then we add a venetian blind to take care of this situation. But a venetian blind is a difficult piece of equipment to keep clean. Perhaps it would be better to control sun and glare by exterior sunshades, vanes, or overhangs of various types. Next we hang a curtain at either side of the window, covering up part of the glass. I feel that this spot of color, texture, pattern is needed at the window, so why not omit glass from this side area to begin with? But if we do have windows right across the end wall, why not have the side panels fixed and the center section operative? In this way not only will the curtains not interfere with the ventilation when the central section is opened but also they will be saved the wear and tear of blowing about, getting wet, and catching in the window mechanism. I have seen very few windows designed in this fashion. It is usually the other way around.

Maybe the whole window arrangement should be changed. The windows would remain, of course, in the exterior walls parallel to the long side of the bed.

But perhaps the glazed surfaces might be placed in walls perpendicular to the bed in a kind of bay arrangement with the parallel wall opaque. Perhaps the kind of filtered light reflecting off the ceiling might bring happier results. Maybe not, it might be too dim. But anyway, we might think of something besides an entire glass wall.

The walls in most patient rooms are plaster and paint. Some vinyl fabric wall covering has been introduced in areas that need special protection—such as around lavatories. Vinyl should cover the entire wall rather than just a patch around the lavatory. There are so many patches of colors and materials in a hospital room. The walls and floors and the ceiling are the big areas, but within that framework you have all the furniture, all the equipment, lighting fixtures and connections. Buttons, pulls, oxygen connections, blinds, draperies, cubicle curtains, flowers, radios and a dozen other items, all squeezed together in the smallest possible space. So again I say, *simplify, unify* and you will get less confusion for the eye.

This same principle holds true in choosing a color sequence for the rooms. A change of pace is needed as one walks around the building. To relieve the uni-

formity, both cool and warm colors should be used. In this way, one can build up neither a feeling of excitement nor depression. The colors selected for the rooms should be slightly grayed, not too bright. These will be more restful and will appeal to a greater number of people. The use of too brilliant color or too much of any one color may stir up unfavorable reactions in some persons. (This point may be of value and should be emphasized to the building or decorating committee.) They must remember that the building is not being designed to suit their particular likes and dislikes but to try to fit the tastes of the greatest number of people. And they should also be reminded of the fact that color for the sake of color is not good. It must be used with some purpose in view.

A more brilliant use of color may be made in some of the other rooms for the hospital.

Let us take a look at some of these other rooms and see what problems they pose. The utility rooms, the pantries should have tile wainscot to ceilings and should have acoustic ceilings to prevent noise from being carried out to patients.

I should like to comment about the counters for these various areas. Whether of stainless steel or of other materials, the backsplash should be carried up higher than it usually seems to be. If there are cabinets above the counter, certainly the backsplash should be carried up to the underside of the cabinet. Otherwise one gets a nasty little bit of painted plaster to take care of between the back of the counter and cabinet. And it is almost impossible to keep this neat and clean looking.

Other rooms such as staff lounges, libraries and locker rooms, should be treated with attractive furniture and sufficient equipment to be comfortable. I have found that very often these rooms are too small to take the chairs, tables and sofas or couches that are necessary to make the room useful. Interesting furniture does not mean fussy furniture.

The dining room should provide a relaxing, friendly atmosphere. These rooms should certainly offer a change to the doctor or nurse.

Clean attractive dining areas should be provided for all employees. No office partitions nor dull colors here. There are so many fine new decorative wall partitions that are available or may be designed using wood laminates, plastics, etc. All are sturdy and easy to maintain. The type of lighting should be carefully planned to make both people and food look well. Incandescent lighting is usually better for dining areas.

### Lighting

Lighting levels, when used, should be designed for comfortable seeing. But this seems difficult of achievement in the hospital bedroom. It always seems to be up or down at the wrong time or the wrong spot. If the person in bed wants to read he is often in his own shadow, or sending his glaring light into the eyes of the person in the next bed. The light doesn't ever seem quite right, for the nurse or doctor. And if there is a floor lamp in the room, it is always in the way of someone, or marking up the wall by being pushed up against it.

Ceiling lights don't seem generally to be recommended. So I have been wondering if there wasn't some way of working out an adaptation of the little beam spot that they have on airplanes. But there would have to be some way of opening up the lens, widening the beam so that the light would cover a larger area than just the book in bed. With variations of this idea, the bed could be illuminated, or

even larger areas. Perhaps a cove could be used on another wall for general illumination.

Artificial light can have an important effect on the colors of our finishing materials. The whole color scheme may be made more intense or completely washed out. I have just had this experience in testing tile colors for a school. Under fluorescent light, a yellow tile I had selected became so intense that a much paler color had to be substituted.

Then too, lighting can be useful in adding shade and shadows to the rooms that demand more interest than can be gained from an evenly diffused lighting scheme. A hospital for the most part is pretty slick and smooth in its finishes—this for the sake of eliminating dirt collectors. The result is a little monotonous. The shades and shadows created by the lights help to dispel this effect. In other words, we add a kind of texture without adding the rough surfaces.

Lighting at all times is a difficult problem. Therefore special attention should be given to its effect upon color schemes and textures of the finishing materials.

### Summary

This brief review of the problems of interior design for a hospital may serve as a useful guide to principles to many other types of projects. Whether it is a school, a bank, an apartment house—each is an environment built around specific human needs. It is evident that we can never lose sight of the importance of the finishing materials that we use for our buildings. They are the *things* that the public sees and experiences. So make them interesting. This does not mean that our finishing materials have to be fussy, difficult to maintain, or infinite in number. In fact, I would say limit the numbers of different kinds of materials. Get the variety by changes in color of the same material. One benefit will be that the maintenance staff won't have to keep so many different types of cleaning materials on hand.

Another point of architectural control that will contribute to more successful interiors will be that of seeing that the desired finishing materials, furniture and equipment furnishing are written into the specifications. This will take the problem out of the hands of the sometimes whimsical choices made by administrators (in institutional work) who may not be necessarily schooled to appreciate or be sensitive to the need for aesthetic integrity in coordinating an interior scheme.

Color should be used with thoughtful discrimination—not, in a primitively audacious way. The whole environment of color should enhance dignity and scale and not be intimidating.

And finally, I would urge that architects continue to be most conscious of spatial and volume relationships in the interiors of their building. If they do not feel that they can follow in detail the development of the interiors of their projects, they should entrust this responsibility to a highly qualified individual member of their staffs or engage the services of an interior design consultant.

The client's response will be measured by the total character of your project. Interiors are a critical area of your professional practice. Don't treat them as step-children of your experience or let them—like Topsy—just grow. Finally, a successful interior design is the product of early stage planning, built around human needs and behavior patterns and is to be taken as seriously as all the other requirements of the architect's program.



INTEGRALOCK



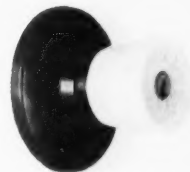
CONCEALED DOOR CLOSER  
AND MORTISE LOCK

SEMI-CONCEALED DOOR CLOSER  
AND MAGNALOCK

SURFACE DOOR CLOSER  
AND RIM EXIT DEVICE

The newest fashion in a complete line of architectural hardware. Protect your clients, specify high style locksets, exit devices, door closers and miscellaneous hardware from one manufacturer—Sargent—a single source of quality and responsibility for almost 100 years.

Complete integrated line of matched designs and finishes includes new Delrin<sup>™</sup> knobs and fired copper roses as well as other features most wanted by America's leading architects. Call your Sargent supplier now. Or write Sargent & Company, New Haven 9, Connecticut.



NEWEST FASHION... Fired copper rose and Delrin knob. Turn page for color combinations.

\*Du Pont



# SARGENT

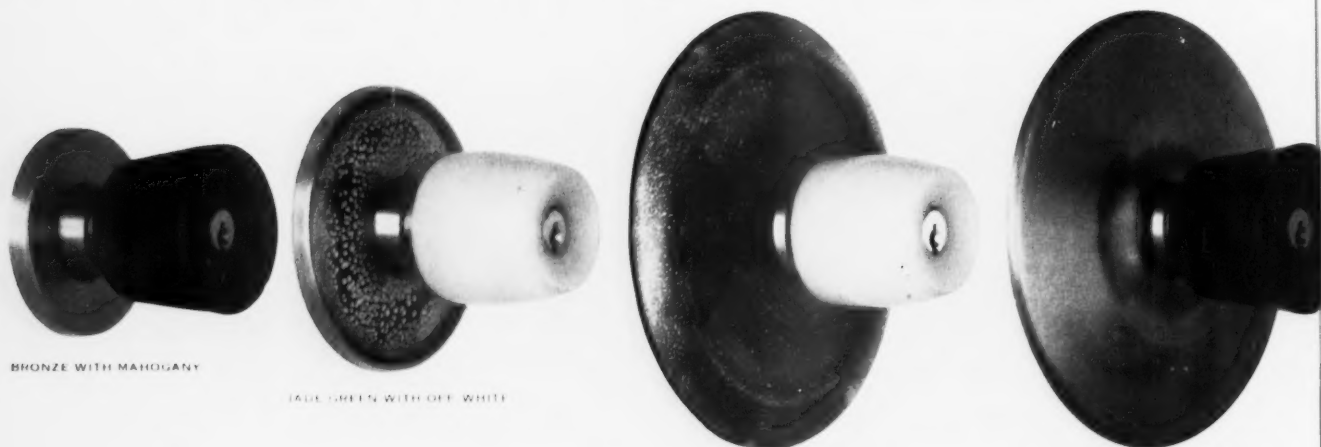
THE NEWEST FASHION IN A COMPLETE LINE OF ARCHITECTURAL HARDWARE



**The newest fashion  
in architectural locksets...**

Delrin knobs and fired copper roses available with Integrallock, Sentrylock, Magnalock and Mortise Lock.

Choose from a full range of color combination

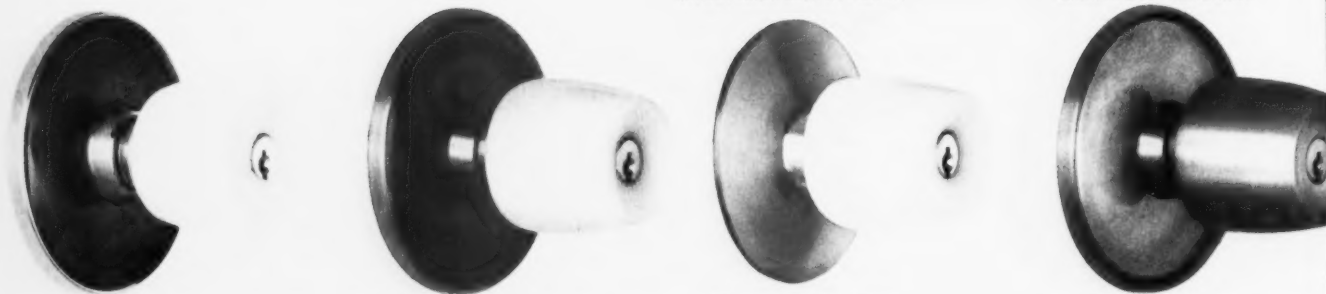


BRONZE WITH MAHOGANY

JADE GREEN WITH OFF-WHITE

GALAXY GRAY WITH OFF-WHITE

BRONZE WITH MAHOGANY

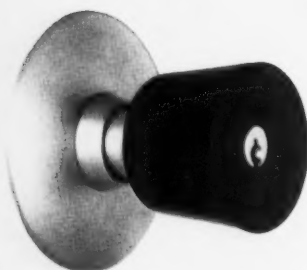


DUCKS HEAD BLACK WITH OFF-WHITE

SUNBURST RED WITH OFF-WHITE

BRASS WITH OFF-WHITE

ANTIQUE GREEN WITH BRONZE



ALUMINUM WITH BLACK

**DELIRIN® KNOBS AND FIRED COPPER ROSES**

Locksets styled to charm . . . to warm a doorway with friendly color.

Non-static, scratch-proof, Delrin knobs combine the strength properties of metal and the drama of color. Choose from Black, Off-White or Mahogany.

Brought to you in a dramatic revival of the ancient art of precious enameling, fired

copper roses are available in Jade Green, Sunburst Red, Antique Green, Ducks Head Black and Galaxy Gray.

Delrin, fired copper, and standard metal finishes provide unlimited decorating opportunities. For particulars call your supplier or write: Sargent & Company, New Haven, Connecticut.

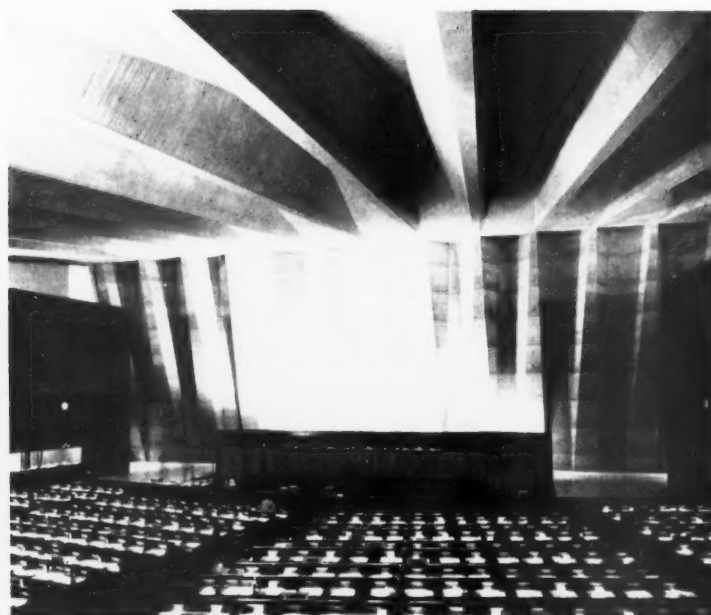
DUPON



**SARGENT**

THE NEWEST FASHION IN A COMPLETE LINE OF ARCHITECTURAL HARDWARE





## brief pictorial survey of interiors by architects

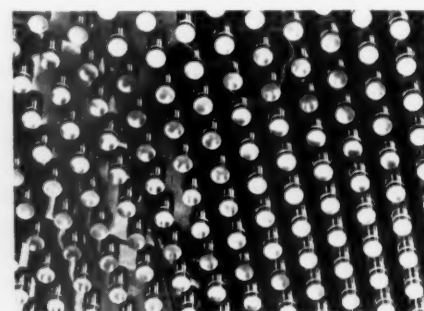
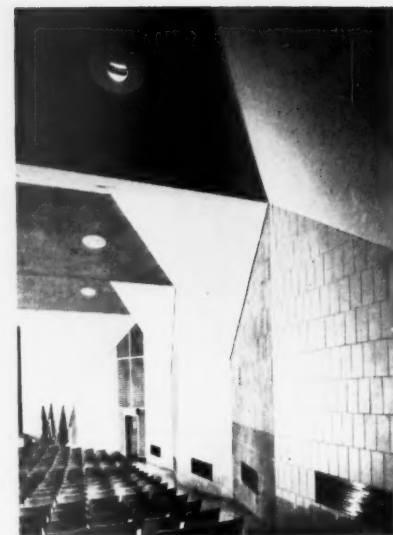
*The following seven pages contain a pictorial portfolio of interiors designed by architectural organizations, submitted in response to an editorial request. Our purpose is to present a cross-section of interiors designed or supervised by architects in the hope that this all-too-brief essay will serve as an index to contemporary architectural thought and action on the subject. Therefore, we have not presumed to evaluate the material—other than to make a reasonably cogent selection that will make the content meaningful. Reference to proprietary materials is based on data submitted by the architects themselves. Selection of photographs was based on architectural interest, limitations of space available and representative design categories.*



A

B

(A) The Permanent Headquarters Building for UNESCO in Paris, France, completed in 1953, has utilized the dramatic plastic qualities of concrete for the aesthetic expression of the conference room. The wall is concrete folded plate bearing wall and the roof construction is a folded plate with the stiffening slab following the line of compressive forces. Architects: MARCEL BREUER, FAIA AND ASSOCIATES and BERNARD ZEHRFUSS, Architect. Structural Engineer: Pier Luigi Nervi. Photo: Gilles Ehrmann, Paris (B) Bottom photo: One of the circular conference areas in the Central Hall of the Van Leer Building at Amstelveen, Holland. This conference niche gives visual and acoustical privacy. It is faced with vertical teakwood and its interior is upholstered. The floor is of dark gray Norwegian slate with cleft exposed surfaces and sawn edges. Breuer furniture. Architect: MARCEL BREUER, FAIA, MARCEL BREUER AND ASSOCIATES. (Photo: Jan Versnel, Amsterdam)



A	B	C
D	E	F

**THE CEILING AS A FOCUS: (A)** The multi-purpose central room of the Warson Woods Elementary School in Missouri has a highly decorative ceiling created by the exposed underside of a lamella arch roof construction. Electric wire molds are used on the glue-laminated beams for plug-in cones for lighting flexibility. Bright primary colors were used, applied sparingly, in sharp contrast to white, gray or black backgrounds as a preferable treatment to usual over-all pastel scheme found in many schools. Architects: HELLMUTH, OBATA & KASSABAUM, INC., St. Louis; Associate Architects: CAUDILL, ROWLETT & SCOTT; Engineer: Smith, Hanlon, Zurheide & Levy, Inc.; General Contractor:

George L. Cousins Co. (Photo: Stoller). **(B)** Architects SKIDMORE, OWINGS & MERRILL designed a 70' steel space frame to provide a dramatic ceiling in the form of a Gothic Rose window for San Francisco's Crown Zellerbach office of the American Trust Co. **(C)** ARCHITECTS ASSOCIATED, KATZ, WAISMAN, BLUMENKRANTZ, STEIN & WEBER of New York City created an acoustical shell within the structural frame of the Auditorium of the Wm. E. Grady High School in Brooklyn, N.Y. The resultant form dictated the aesthetic. Entire interior is finished in warm off-white to soft gold-beige tones. Black is integral to match and wood is natural finish birch. Ceiling: U.S. Gyp-

sum hard white plaster on reflective areas. Acoustical plaster on absorptive areas. Walls: Waylite Block natural—absorptive areas and Integral Face Block—reflective areas. Seating: American Seating—natural birch finish. Floor: Kennedy Rubber Tile. Wood Grille: Hyde Murphy Architectural Woodwork. Aluminum Louvers: Albro Metal Products. Lighting: Century Lighting. Paint: Martin Senour. (Photo: Ezra Stoller) **(D)** Architects LEDNER AND SAPUTO of New Orleans, La., utilized 24 steel trusses radiating out from the center hub of the 152' diameter roof of the one story National Maritime Union Hiring Hall at Baltimore, Md., as a forceful aesthetic element. The building

is an assembly place and hiring hall for union members. **(E)** HERTZKA & KNOWLES and SKIDMORE, OWING & MERRILL, were associated architects for the design of San Francisco's Crown-Zellerbach Building and lobby ceiling shown in photos **E** and **F**. The distinctive lobby ceiling diffuses light through more than 16,000 plugs of cast acrylic rod. **(F)** detail of acrylic plugs, 2" long and 2" in diameter, hang through perforations in highly polished brass ceiling. Lower end of plug is sanded to provide uniform level of transmitted light and a square of acrylic sheet is cemented to other end to serve as a hanger.



A	B	C
D	E	F

**THE STAIR AS A POINT OF INTEREST:** (A) Shown here is one of the stairs at each end of the Main Lobby leading to the mezzanine of the American Airlines Terminal at New York's International Airport at Idlewild. Materials used included: Walls and columns: light este travertine. Floors: terrazzo. Stair treads: black terrazzo with light gray carborundum strips. Guardrail and handrail: teak. Handrail brackets: stainless steel. Mezzanine fascia: black and gold marble. Planting bed lined with colored Mexican beach pebbles and plants are Boston ferns and Araucarias placed in chrome-plated wire baskets. Architects: KAHN AND JACOBS of New York. (Photo: Stoller) (B) A suspen-

sion system of aluminum rods from curved beams concealed in the ceiling above is provided for the entrance lobby ramp to the second floor of the Convair Astronautics Division of General Dynamics Corp., at Kearney Mesa, Calif. Rods support a framework of specially extruded aluminum sections in which a reinforcing mat is placed. Soffit is of plaster with a smooth lime putty finish; the fill material is lightweight concrete. Walking surface is inlaid vinyl tile; entire finished surface of ramp is exposed aluminum framing; aluminum stay rods on interior circumference are secured to a central pedestal through a spun aluminum cap with aircraft-type stainless steel turnbuckles

and fittings. Architects: CHARLES LUCKMAN ASSOCIATES; WILLIAM L. PEREIRA, FAIA, Associate Architect, both of Los Angeles. (C) The entrance lobby stairs of New York's Theater and Amusement Service Employees Union, Local 54, features stair steps in white Venetian terrazzo with red and black chips, and a rouge antique marble elevator lobby. The steel structure is painted black and the railing and intermediate landing grille are of aluminum. Architect: GIOGIO CAVAGLIERI, AIA of New York City. (Photo: Stoller) **THE SMALL PROFESSIONAL OFFICE:** The following photographs feature office interiors by the internationally-famed RICHARD J. NEUTRA, FAIA. (D) Mr.

Neutra's own office showing reception office and conference rooms. Mr. Neutra is seen with his assistant, Mrs. Kelly. This office, together with those of the reception room and an executive room (E and F) of a motion picture star's well known Los Angeles accounting firm, Goldberg, Marshall and Company, are characterized by their clarity, simplicity and directness of function and material use. Architect: RICHARD J. NEUTRA, FAIA and Collaborators: BENNO FISCHER, SERGE KOSCHIN & JOHN BLANTON. (Photos: Shulman).





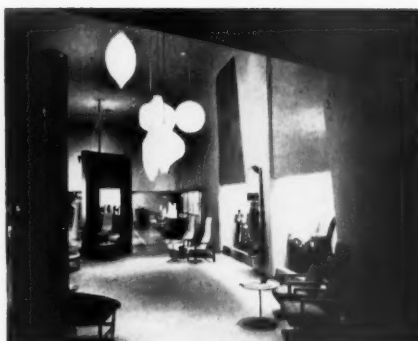
A	B	C
D	E	F

**DINING, RESTAURANT AND CLUB FACILITIES:** (A) The architects utilized local materials and techniques such as cement plaster on concrete, terrazzo and cement tile in the creation of the 1,200-acre resort and hotel development of the Dorado Beach Hotel at Dorado, Puerto Rico. Dark subdued earth colors articulate the architectural plans. Bright colors were limited to occasional fabrics, doors, louvers or accessories. Here, the Bar of the Dorado Beach Hotel is characterized by great understatement and the simplicity of the pierced rectangular niches for bottle display. The interior finish of smooth cement plaster provides a restful background to the rattan furniture and the Central American Mahogany used in millwork trim and the hung ceilings. Handrailings are aluminum by Blumcraft of Pittsburgh. Architects: GOLDSTONE & DEARBORN of

New York and O'KELLY & MENDEZ of San Juan, Puerto Rico, Associated Architects and Engineers. Structural Engineers: Praeger-Kavanagh of New York and Mechanical Engineers: Syska and Hennessy of New York. Interior Designer: Ann Hatfield Associates of New York. (Photo: Richard Meek). (B) The main dining room of the Nile Hilton Hotel, Cairo, Egypt, was totally designed by WELTON BECKETT, FAIA AND ASSOCIATES, Architects and Engineers of Los Angeles, for the entire hotel. Drapery has a Pharaonic Nile boat design hand-appliqued and embroidered in natural, gray and blue colors. Rug is Nile green on blue; chairs are of Pharaonic design covered in blue plastic and design theme is carried to column cap reflectors of carved plaster and glass. (C) The cafeteria of the Mutual Insurance Co. of Hartford continues on a

terrace at a lower level. Featured are diamond patterned Armstrong vinyl asbestos floor positions under circular Micarta-top Herman Miller tables. The Miller plastic chairs in yellow or light gray. Lighting globes by Kurt Verson. Travel posters decorate the walls. Architects: SHERWOOD, MILLS and SMITH, Interior Consultants: Associated Designers For Interiors, Inc. (Photos: W. F. Miller). Shown here are the Waiting Lounge (D) and the Dining Room (E) of San Francisco's World Trade Club located in the famed Ferry Building, a landmark on the Embarcadero—which has an exciting view of the Bay Bridge as a backdrop. All walls are steel studs with plaster and walnut paneling over. Ceilings are acoustical plaster. Masonry grillwork dividing the waiting lounge from other rooms is cast by Pietro Studios, Van Nuys, Calif. The crystal

chandeliers are Anshen and Allen design were manufactured by Casella Lighting Co., San Francisco. Architects: ANSHEN & ALLEN, San Francisco. Photo: Stone & Stecchi. (F) A gourmet restaurant, The Continental, in Paramus, N. J., afforded the architect the opportunity to create a high-fashion continental mood for dining. The Appian Room is seen through the entrance doors. Classical motifs were carried in wall paneling and carpeting in a coral pink and grayed blue. The door hardware is by P. E. Guerin. The reproductions of the Roman sculptures are by Caproni Galleries. Architects: MORRIS LAPIDUS, KORNBLATH, HARLE & O'MARA of New York and Miami Beach. (Photo: Gottscho-Schleisner, Inc.)



A	B	C
D	E	F

**SELLING ENVIRONMENTS:** (A) An emphatic and striking use of graphics creating an immediately recognizable symbol for the Volkswagen Showroom on 58th Street in New York's Savoy Plaza Hotel Building. Given an 11'-0" width, the architects provided a spacious feeling by the absolute simplicity of white plaster walls and ceiling and white vinyl tile floors. The entire store front lifts away to allow cars to enter. Architects: ARCHITECTS ASSOCIATED: KATZ, WAISMAN, BLUMENKRANTZ, STEIN & WEBER of New York City. (B) The luxury of ample seating and circulation space is evident in the Magnin Store at Las Vegas,

Nev. The furniture invites seating and its casual arrangements promise comfort and a relaxed merchandising mood. Bubble lamps dominate the space and provide a key point of attention and attraction to merchandise. Architects: VICTOR GRUEN ASSOCIATES, Los Angeles. (Photo: Gordon Sammers). (C) The third floor Glass and China Forecast Shop of Denver's May Store has a setting in which visual focus is placed on the illuminated shelving at the perimeters of the space. The rigid geometry of the design forces attention to the objects on sale. Architects for the Interiors: KETCHUM & SHARP of New York. (Photo:

Warren Reynolds). (D) Fifth Avenue's Takashimaya Department Store created by American architects with Junzo Yoshimura features the use of woods, shoji screens and interior gardens in the distinctive Japanese manner. Shown here is the furniture sales area in the basement. Architects: STEINHARDT & THOMPSON of New York. (Photo: Louis Reens). (E) The Bally Shoe Store on San Francisco's fashionable Union Square provides a spacious setting for the selling of shoes for women. The entry space provides a generous circulation area and an excellent impulse buying area at the point of entry and de-

parture. Architects & Engineers: JOHN S. BOLLES, AIA, San Francisco (Photo: Finkle Jones). (F) A wholesale showroom for Napier Jewelry provides a dignified and unhurried atmosphere to prospective buyers. Divider drapery striped blue, showroom tables, the sofa, and carpet are the architects' design. A glass and black anodized aluminum frame partitions set off individual spaces. Woods are butternut veneer. Other incidental furniture and accessories are from Tiffany and Co., Baker, Dunbar, America House and Georg Jensen. Architects: VOORHEES, WALKER, SMITH, SMITH & HAINES (Photo: J. W. Martin).



A	B	C
D	E	F

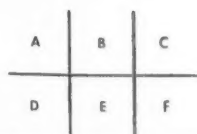
**EDUCATIONAL/INSTITUTIONAL FACILITIES:** (A) The auditorium of The Temple at Cleveland, Ohio, has walls, floors and ceiling which curve or angle to focus on its stage. The resulting shape is a softly curving ellipse, twice as wide as it is deep, achieving a friendly arms-around-its-audience feeling. The stage curtain curves into the stage in a wide arc and flanks either side of the opening, completing the elliptical shape of the auditorium. Carpeting is a turquoise stippled with gold to complement the curtain colors. The seating is wood-backed and the aisle ends are finished in light wood tones. Upholstery and backs are in a deep turquoise tweed. The ceiling is of curving planes of yellow-gold painted plaster and dotted with downlights. Vertical edges of the planes are painted turquoise. Architects: PERKINS & WILL, Chicago, Ill.—

White Plains, N.Y.; Partner in Charge: Wilmont Vickrey, AIA; Equipment Consultant: Charlotte Link of Perkins & Will and Associated Architect: Michael Kane, AIA, Cleveland, Ohio. (Photo: Bill Hedrich, Hedrich-Blessing). (B) View of the living room with dining halls and other units visible through the windows of the University of California Residence Halls at Berkeley, Calif. Other information: Furniture: Knoll Associates, Thonet, Metropolitan; Carpets: William Vokler & Co., Lighting Fixtures: Shaper Lighting Products; Plant Pots: Architectural Pottery and Fiberglass Draperies: Ben Rose. Architects: WARNECKE & WARNECKE, San Francisco. (Photo: Robert Sturtevant). (C) Reception area of executive suite of California Teachers Association headquarters at Burlingame, Calif., features a hand-woven tapestry by John Smith depicting the Tree of

Knowledge. The tapestry is set off by teak batten walls and doors opening into the board floor and the executive secretary's outer office. Floor covering is a handmade raw umber and ochre tweed. Architects & Engineers: WELTON BECKETT, FAIA AND ASSOCIATES, Los Angeles, Calif. (Photo: Gerald Ratto). (D) The Main Lobby and Mezzanine Art Gallery of a social center and school building for the Baltimore (Md.) Religious center features gray beige walls, mahogany paneling and doors, beige vinyl floor and sun draperies. The effect is a quiet and dignified setting for the Center. Architect: DANIEL SCHWARTZMAN, FAIA. (Photo: Alexandre Georges). (E) The Conference Center of the McGregor Memorial Community at Wayne State University offers the dynamics of the plasticity of concrete for its aesthetic effect. This much publicized center is

known for its intricate interplay of form and light. Architects & Engineers: MINORU YAMASAKI AND ASSOCIATES, Birmingham, Mich.; Structural Engineers: Ammann & Whitney, Milwaukee, Wisc. Photo: Baltazar Korab). (F) A view of one of the Main Floor lounges of the Loeb Student Center of New York University at Washington Square. The interior was planned for durability and easy maintenance. Lounge seats approximately 500 people and is in continual use. Relaxed feeling created by winding serpentine arrangement of chairs around rugs and a series of smaller conversational areas. Interiors: GEORGE NELSON, AIA, AND COMPANY under the supervision of Dolores Engel. (Photo: Stoller)



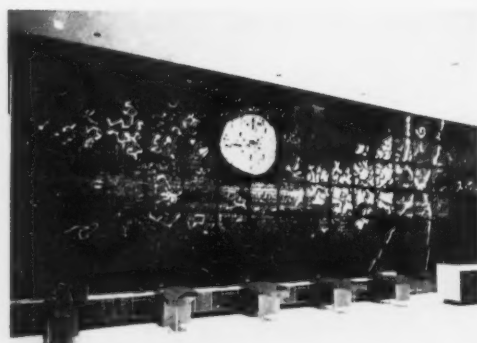


**MEDICAL AMENITIES: OFFICES, CLINICS, & HOSPITALS:**  
(A)(B)(C) The new Medical-Science Building of suburban Philadelphia's Lankenau Hospital provides an emphasis on health maintenance and preventative medicine. The top three of the six main floors are devoted to ambulatory patient care, where, in addition to private and semi-private rooms, patients are able to eat and relax in the cafeteria, lounge and top floor solarium above. These activities in addition to the operative medical facilities, are brought together in a trim rectangular unit that complements the parent building. A predominating burnt orange roman brick is used inside as well as outside which keynotes a warm earth color palette for finishes and fur-

nishings. Against natural masonry backgrounds, both the reception lobby and solarium lounge feature natural wood tables, pottery lamps, and upholstered chairs in gold, smoke, olive, tanbark and sand tones. Nursing floors are characterized by the harvest gold color of painted plaster corridor walls. Light sand bedroom walls are offset by muted colors on the headboard wall—olive in some rooms, blue in others, and copper in others. Gray-and-white striped curtains, walnut bedsteads and night tables, and occasional chairs with bright upholstery create an appealing atmosphere. On the first and second or "technical" floors, colors are limited to the neutral grays and tans of vinyl tile, ceramic tile, structural tile and painted

plaster. Architect: VINCENT G. KLING, FAIA, Philadelphia. (Photos: James H. Karales). (D) The Barton Clinic at Watertown, S. D., required a large waiting and reception area for patients in a clinic with complete medical services from diagnostics to minor surgery. The circulation area of the reception lobby and the pool are illuminated by a band of clerestory windows and at night by a concealed cove light. The shoji panels open the seating area into another waiting area behind. The interior colors are white, light gray and the dark brown of the brick which carries in from the exterior. Floors: Vinyl asbestos tile; Walls: Plaster; Ceilings: Acoustical tile and plaster; Pool: Imported Italian Mosaic with stepping stones

of green antique marble; Reception counter: wood grained plastic laminate. Furnishings by Paul McCobb. Architect-Engineer: THORSHOV & CERNY, INC. Project Architect: William J. Miller. Project Designer: Theodore Butler. Interior Designer: Newton Griffith. (Photo: Warren Reynolds). (E) and (F) Reception and waiting rooms of Grant Beckstrand, MD, President of the Radium Society of America and a famous cancer specialist. Again, we see in these photos the highly disciplined and precise touch in scale and form of Richard J. Neutra as in the work shown on page 23. Architect: RICHARD J. NEUTRA, FAIA and Collaborators. (Photo: Julius Shulman).



A	B	C
D	E	F

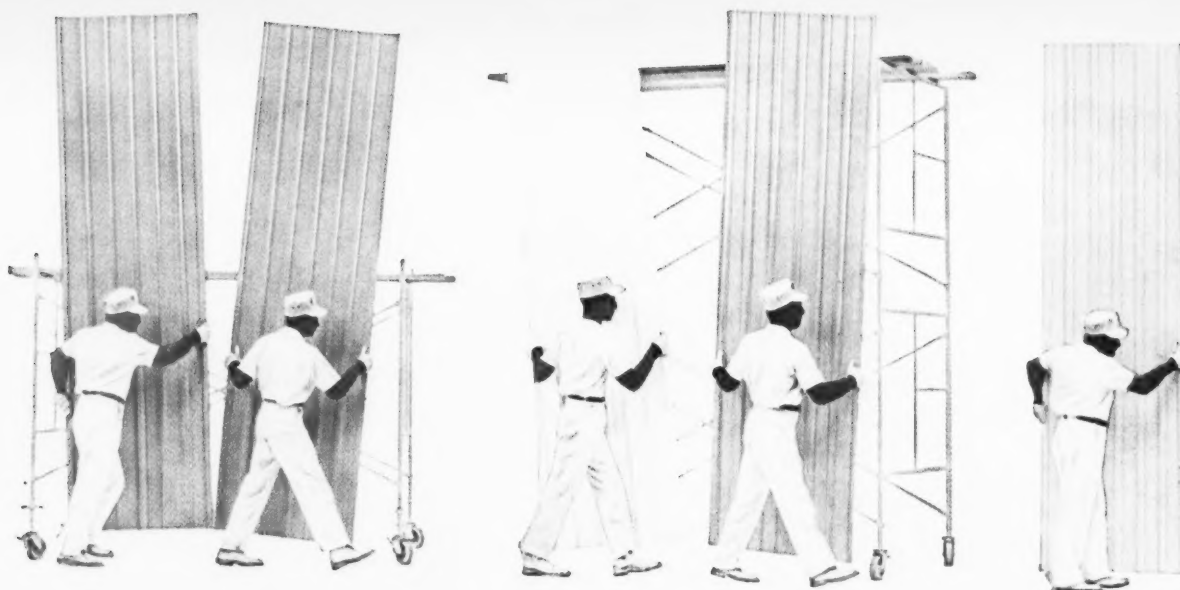
**LARGE OFFICE & ADMINISTRATIVE RECEPTION AREAS:** (A) The Reynolds Metals Co. Office Building at Southfield Township, Mich., has a dramatic source of natural lighting in the delicate tracery of a truss-framed skylight over the reception area. The expanse is accented by Japanese garden area contained within two rectangles. Architects & Engineers: MINORU YAMASAKI AND ASSOCIATES, Birmingham, Mich. Structural Engineers: Ammann & Whitney, Milwaukee, Wisc. Interiors: W. B. Ford Design Corp., Detroit, Mich. (Photo: Baltazar Korab.) (B) The main entrance lobby of the International Business Machines Corp., regional headquarters at Los Angeles, features a sculpture, on the wall, of a bronze and brass oscilloscope pattern by Bernard Rosenthal at Los Angeles. Walls are painted plaster and floor is of black terrazzo and black vinyl tile. Panels (at center rear) are plastic laminated panels.

Furniture: desk, Knoll; sofas, chairs, coffee tables, LaVerne; rug, V'Soske; pots, Architectural Pottery, Los Angeles. Architects: CHARLES LUCKMAN ASSOCIATES, successor to Pereira & Luckman. (Photo: Marvin Rand.) (C) The Division of Employment Security Building of the State of Missouri at St. Louis provides an attractive image of government administration in a three story and basement structure which utilizes a simple structural system of reinforced concrete columns and slabs which also provides the ornamental theme of the project. The inverted pyramid pods are exposed and the outer rank of columns, with the pods defining triangular spaces at the top—forms a graceful continuous colonnade around the building. The concrete columns with a smooth pour finish are painted an almost white light beige. Along with beige travertine spandrels, they provide a crisp contrast with the gray heat-absorbing

glass of the deep windows. HVAC diffusers are placed on a modular grid coordinated with the lighting module. The completely modular system of fluorescent fixtures is designed for interior space arrangement flexibility. Acoustical tile panels are mounted directly to the slab surface. Colors are restrained with beige tones set off by white lines and gray glass predominating. A clear deep blue is used at escalator core walls. Architects and Engineers: HELLMUTH, OBATA & KASSABAUM, INC., and Engineers Collaborative, Inc. Structural Engineer: William C. E. Becker. (Photo: MacMizuki.) (D) A mural conceived in the spirit of the air age and to provide an exciting reception area to visitors of the KLM Building on New York's Fifth Avenue has a heroic scale of color, light and motion to dominate the ground floor space. Architects: L. L. RADO, ANTONIN RAYMOND AND L. L. RADO with the designer

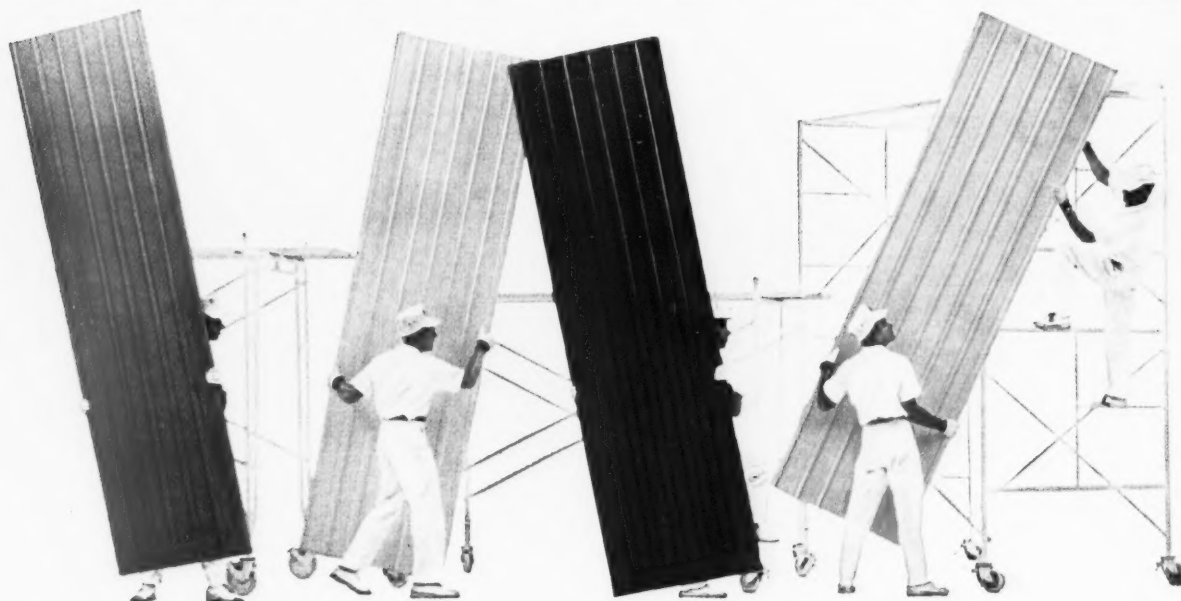
of the mural, Gyorgy Kepes, Professor of Visual Design, MIT. (E) The fourth floor reception room of the Seagram Building in New York uses contemporary paintings to highlight the decor. The plate glass coffee table and Barcelona chairs designed by Mies Van der Rohe, FAIA. Walnut reception desk by Jens Risom; the swivel chair by Knoll Associates. Richard Kelly was lighting consultant. Showcases have their own lighting system. Panels at far end of room are of English oak. Architects: MIES VAN DER ROHE and PHILIP JOHNSON. (Photo: Ezra Stolle.) (F) The two-story lobby of the Dorr-Oliver, Inc., building has a free standing stairway to executive offices. Floor is white terrazzo, walls are walnut paneled. Leather upholstered Barcelona chairs form small waiting area. Architects: SHERWOOD, MILLS AND SMITH, Stamford, Conn. Interiors: Rodgers Associates. (Photo: Joseph Molitor.)

Circle 111 for further information about STRAN-STEEL →  
Architectural & Engineering News



## STRAN-STEEL PANELS CUT COLOR

Now you can execute your ideas in lasting color using low-cost, practical steel. Attractive, new Stran-Steel ribbed panels are protected with durable color coatings applied at the factory. Panel exposure is a full yard wide and as long as you want. Take your choice of nine compatible Stran-Satin colors—light blue, deep blue, light green, mist green, light grey, slate grey, orange, yellow and white. Colors that are more than skin deep—triple baked-on coatings bonded to galvanized heavy-duty steel. This color is on to stay. It won't fade, chip or peel. Stran-Steel color panels are available in 22-, 24- and 26-gauge to suit your needs—for roofing, siding, curtain walls, canopies, decorative facades as well as interior uses. For details, mail the coupon today or call the Stran-Steel architectural products dealer near you. Check the Yellow Pages under Steel.



STRAN-STEEL CORPORATION, Dept. AE-26, Detroit 29, Michigan

Please send complete information on the new Stran-Steel Color Panels and new Stran-Wall System.

Name \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

Company \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_

**STRAN-STEEL IS A DIVISION OF NATIONAL STEEL CORPORATION**



## What variations from tested floor-ceiling assemblies are permissible?

### *most popular constructions have been tested*

Armstrong Acoustical Fire Guard—the first time-designed acoustical ceiling tile—will meet the nation's strictest building codes. And it will do it in a wide variety of floor-ceiling assemblies.

Since the elements of a floor-ceiling assembly (such as the tile, the slab, the air space in the plenum, and the structural steel supporting the slab) can be varied and these variations can be combined in an infinite number of assemblies, it is virtually impossible to test and report every one. The more popular assemblies have been tested. Variations from tested assemblies which maintain or improve the fire-retardant rating have been accepted by local code officials, building inspectors, and rating agencies.

### *slab construction may vary*

A thicker slab logically improves fire retardance of the assembly. Equivalent thicknesses of poured or precast lightweight concrete or gypsum may be substituted for structural grade concrete. The National Board of Fire Underwriters—sponsoring agency for U. L.—has listings in its fire-resistance rating booklet that state alternate fills of equivalent thickness are permissible in rated assemblies.

### *modification in structural steel*

Acoustical Fire Guard forms a tight fire-retardant membrane which blocks passage of dangerous heat and flame. Structural steel, regardless of its size and shape, will not fail so long as it does not become overheated.

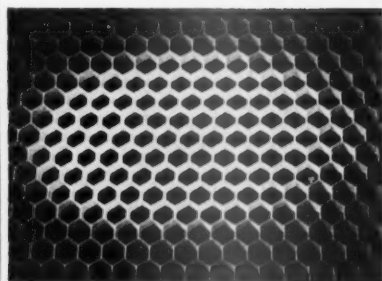
### *depth of plenum chamber*

In the official U. L. test assemblies, the metal members supporting the tile were in direct contact with the structural member—the most critical construction possible. Suspension of the ceiling to create a deeper plenum would not impair the fire retardance of the assembly.

Before you specify your next ceiling, consider Armstrong Acoustical Fire Guard. It will help you give your client a safer building—often at a savings in cost. For more information, contact your Armstrong acoustical contractor or your nearest Armstrong district office. Or write to Armstrong Cork Co., 4209 Ryman St., Lancaster, Pa.

# PRODUCTS, EQUIPMENT, MATERIALS

Report of recent developments by industry, based on data furnished by mfrs. Inquiry cards for further information face pages 1 and 70.



## HEXAGONAL DESIGN STEEL PANEL

**MFR'S DESCRIPTION:** highly refined, practical steel panel with hexagonal design offering strength of 1,450 pounds per square inch crushing load without significant deflection.

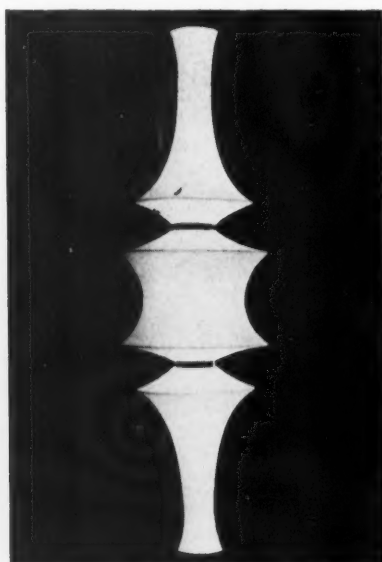
**USES:** decorative and structural applications from illuminated ceiling panels to floor panels in use with laminate materials.

**SPECS/FEATURES:** panel is made of one continuous piece of steel and is copper brazed in reducing atmosphere at 2050° F. *Metacal* has metal thickness of .0083 tin mill black plate steel; weighs 0.98 pounds per square foot painted and 0.94 pounds per square foot unpainted; is painted with two coats of baked white enamel or copper brazed finish; cell sizes are  $\frac{3}{8}$  inch hexagonal. Panel sizes are available up to 2' x 4' maximum with standard sizes 2' x 4', 2' x 3', 2' x 2', 2' x 1', 1' x 3', 1' x 1'.

AIA FILE NO. 15-H

MFR: JOHN J. FANNON PRODUCTS CO.

Circle 200 for further information



## VERTICAL FLOW OF LIGHT WITH STACK ASSEMBLY

**MFR'S DESCRIPTION:** mfr announces introduction of accessory known as *Stack Ring Connection*, permitting George Nelson-designed Bubbles and Net Lights to be joined to create sculptured vertical flow of light.

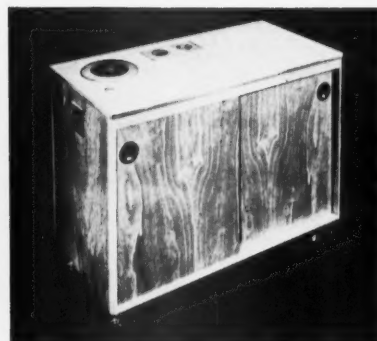
**USES:** decorative lighting.

**SPECS/FEATURES:** stack ring connection is walnut ring,  $\frac{3}{8}$ -inch in thickness, with clips held in place by screws, and male and female connector plugs wired into each unit. Ring permits easy end-to-end joining of any two Bubbles or Net Lights, and may be used to create assembly reaching maximum of 48 feet. By stacking several units with one or more connections, fluid column of light of unusual dimensions not only manipulates light in given space but creates decorative feature of architectural beauty, mfr states. Approx. retail, \$6.00 each.

AIA FILE NO. 31-F-23

MFR: HOWARD MILLER CLOCK CO.

Circle 201 for further information



## PORTABLE KITCHEN FOR CLASSROOMS

**MFR'S DESCRIPTION:** *Porta-Kitchen* is movable, multi-use unit designed as supplementary demonstration center for homemaking departments in elementary grades and junior high schools.

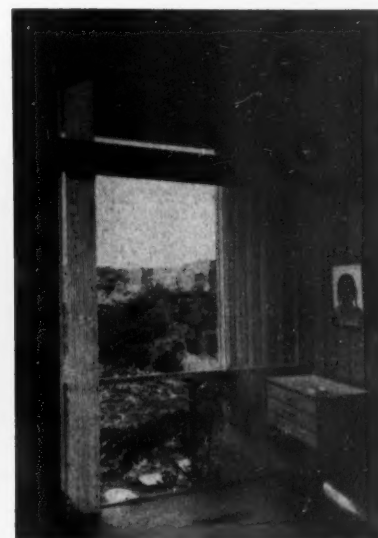
**USES:** demonstration center, coffee bar for lounges, general purpose rooms, recreation rooms, etc.

**SPECS/FEATURES:** three-heat, 110 volt burner is set into laminated work surface, eliminating need for 220 volt current. Powered by NEMA approved three-prong convenience outlet and 15-foot extension cord. Overhead roller suspension doors are available in color. Beneath, there is adjustable shelf storage, tote-tray storage, removable maple cutting board, and metal covered asbestos heat resistant pad. Optional attachments include mixing unit, blender, juicer, sharpener, grinder, shredder, and extra mixing bowl. Finished in natural birch.

AIA FILE NO. 35-C

MFR: EDUCATORS MFG. CO.

Circle 202 for further information



## FOLDING PLASTIC WINDOW COVERINGS

**MFR'S DESCRIPTION:** sculptured traversing drapery, made up of many small sections of rigid plastic squares, combining permanence of plastics with decorative features of fabrics.

**USES:** residential and commercial installations.

**SPECS/FEATURES:** product permits both light and heat control. It hangs in true drapery folds and is as easily installed as any fabric drapery, mfr claims. Plastic sections are molded to give three-dimensional effect and to admit air through inconspicuous slots. Sections are available in variety of colors making decorative pattern effects possible. Light can be controlled not only by traversing drapery, but also by choice of translucent or opaque colors. Made of *Dow Verelite Thermo-plastic*, product is fade-resistant. On window exposed to sun, it reduces heat transfer. Thermal conductivity is

## PRODUCTS, EQUIPMENT, MATERIALS

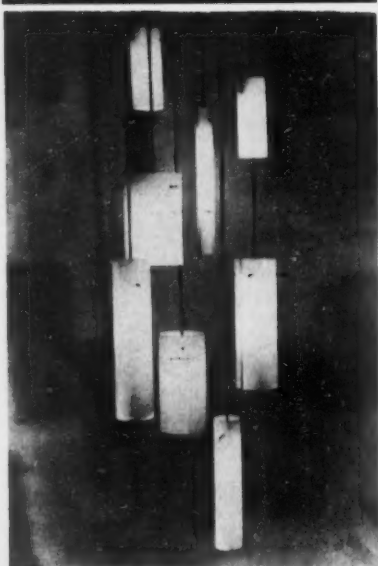
reported to be 1/1000th that of aluminum. Remains cool to the touch even in hottest sun. Stocking ratio is one inch to one foot.

AIA FILE NOS. 28-D, 35-P-2

MFR: JAYLIS INDUSTRIES, INC.

Circle 203 for further information

### LIGHTING



#### PLASTIC CYLINDRICAL LIGHTING FIXTURES

MFR'S DESCRIPTION: mfr announces production of cylindrical fixtures in *Lumacryl*, plastic developed by mfr for lighting field.

USES: commercial and residential applications.

SPECS/FEATURES: plastic fixtures are stated to be identical in appearance to mfr's glass fixtures. Units are translucent white and are said to diffuse the light evenly and uniformly. Each cylinder is cast in one piece to avoid seams and ensure solidity. Fixtures are color stable and available with multiple lampings to handle many different wattages. *Lumacryl* is lighter than glass, facilitating handling and installation and is shatterproof. Available in seven stock sizes, up to 12" in diameter. Colored fixtures are also available for contract installation.

AIA FILE NO. 31-F-2

MFR: HABITAT

Circle 204 for further information

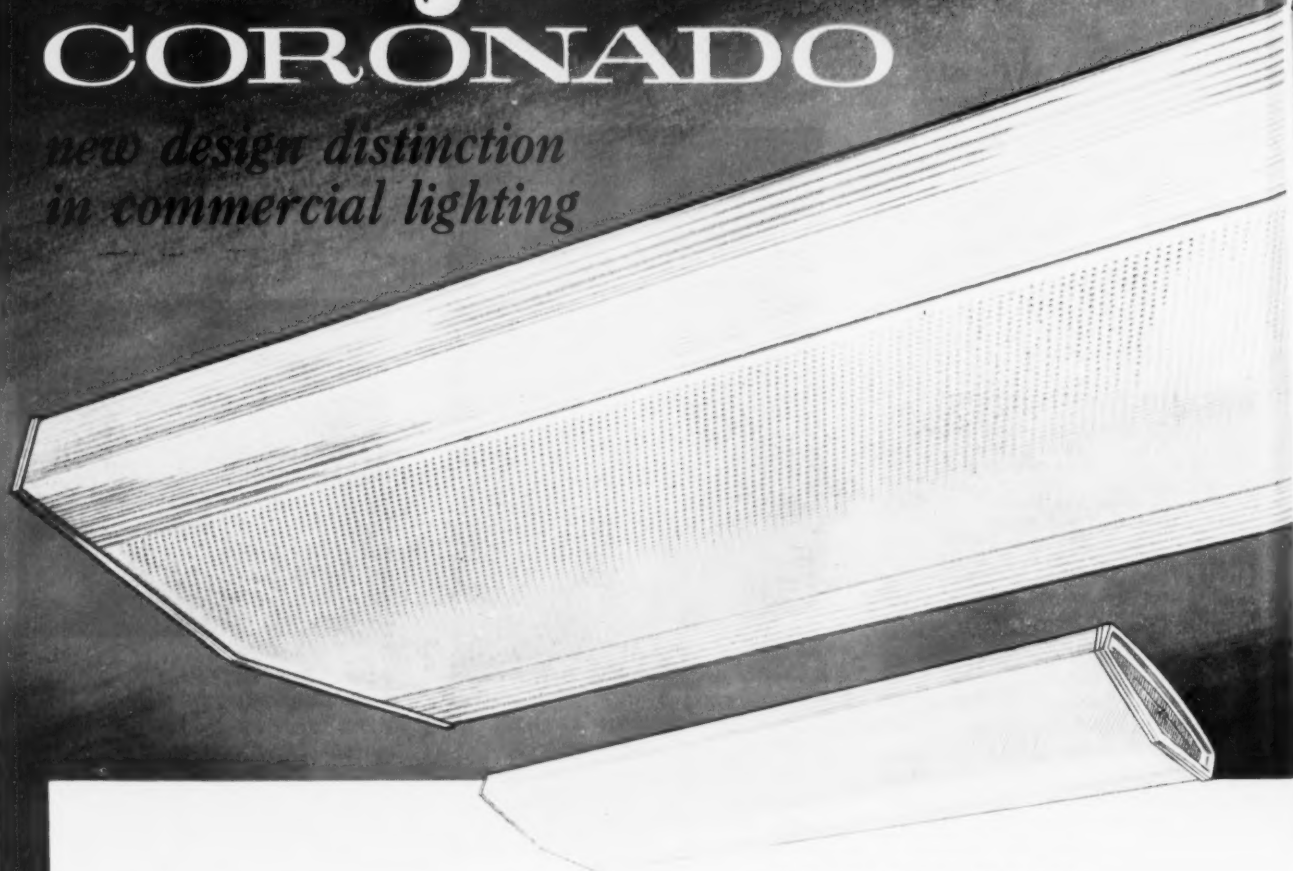
#### AUTOMATIC LIGHT CONTROL SYSTEM

MFR'S DESCRIPTION: photoelectric control with time clock provides com-

*Introducing the elegant... slim, trim*

## BENJAMIN CORONADO

*new design distinction  
in commercial lighting*



Now... Benjamin introduces the ultimate in dramatic fluorescent lighting—the slim trim Coronado. It's excitingly different, with the smart, slender look of distinction. Available in either a clear or "Prisopal"® lens, the Coronado hugs the ceiling in perfect harmony of design, with a visible depth of only 2½". Its distinctive styling sets this unit apart from all other plastic enclosed units.

The Coronado leads the field in practicality, too. *One-piece diffusing element... finger-touch latch... built-in coupler... snap-in wiring channel*—all add up to the easiest installation and maintenance ever. The Coronado combines beauty with new features and dollar savings in a way that assures complete satisfaction, whether used for appearance or price.

#### EXCLUSIVE NEW FEATURES

**NEW... finger-touch latch** hinges from either side, allows basket to swing down or be removed—no tools needed.

**NEW... snap-in wire way cover** provides easy access to wiring and control equipment.

**NEW... end plate design** permits easiest tandem installation, coupling units in perfect alignment.

**NEW... decorative plastic end caps** available for use on individual units or at ends of row.

**NEW... one-piece "wrap-around" extruded plastic construction**—only 2½" visible depth.

Circle 113 for further information



## PRODUCTS, EQUIPMENT, MATERIALS

pletely flexible, economical automatic light control system.

USES: poultry houses, electric signs, service stations, railroad yards, and other storage and work areas.

SPECS/FEATURES: model 6801 photo-electric control turns lights on during any period when natural light intensity falls below set level. Time switch continues to provide pre-set on and off periods regardless of natural light conditions. Photocell unit is weather-sealed in aluminum case for indoor or outdoor mounting and contains a broad area cadmium and sulfide light-sensitive cell that is hermetically sealed and pre-aged. Turn-on valves are adjustable. Unit is connected to indoor-mounted control box containing simple tubeless electronic circuit with double-pole, single-throw load contactor capable of switching up to 6000 watts. Time switch can be easily connected to control box housing circuitry and bakelite terminal board. All terminals are clearly marked, a wiring diagram appears on inside of lid and complete mounting instructions are included with control.

AIA FILE NO. 31-F-33

MFR: THE FISHER-PIERCE CO.

Circle 205 for further information



1 PRISMATIC LENS BOTTOM

2 LINEAR LENS NO-GLARE SIDES

3 LINEAR LENS NO-HOT-SPOT TOP

# NEW

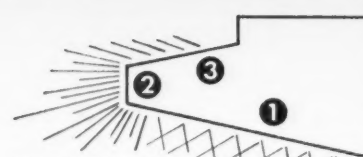
*3-in-1  
light diffuser in a  
surface mounted unit*

### CORONADO—CLEAR LENS (Top)

This new 3-in-1 diffuser boasts a crystal-clear L-120 low-brightness prismatic bottom, complemented by linear refracting lenses on sides and top to redirect light out of glare zone. Here is the ultimate in clear, color-stabilized polystyrene.

### CORONADO—PRISOPAL® LENS (Bottom)

With the addition of opalescent white, this totally new 3-in-1 diffuser becomes a beautiful diffusing surface offering something new in controlled illumination.



### ENGINEERED FOR CONTROLLED LIGHT DIFFUSION

1 Low-brightness L-120 prismatic lens on bottom for superior performance and control.

2 Refracting linear lens on sides redirects light out of the glare zone, effectively controls side brightness.

3 Refracting linear lens on top increases efficiency, spreads light uniformly over ceiling, banishes "hot spots."

For full information on the new Benjamin Coronado, mail coupon to Benjamin Division Thomas Industries Inc., 207 East Broadway, Louisville 2, Ky., Dept. BAEN-9.



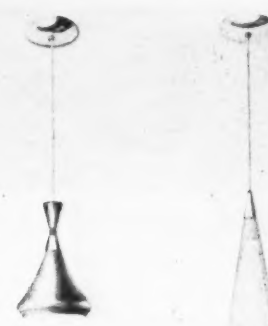
## BENJAMIN DIVISION

### THOMAS INDUSTRIES INC.

The World's Largest Single Source of Lighting for  
Commerce, Industry and Home.

Send FREE copy of Coronado Folder to:

COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_  
NAME \_\_\_\_\_



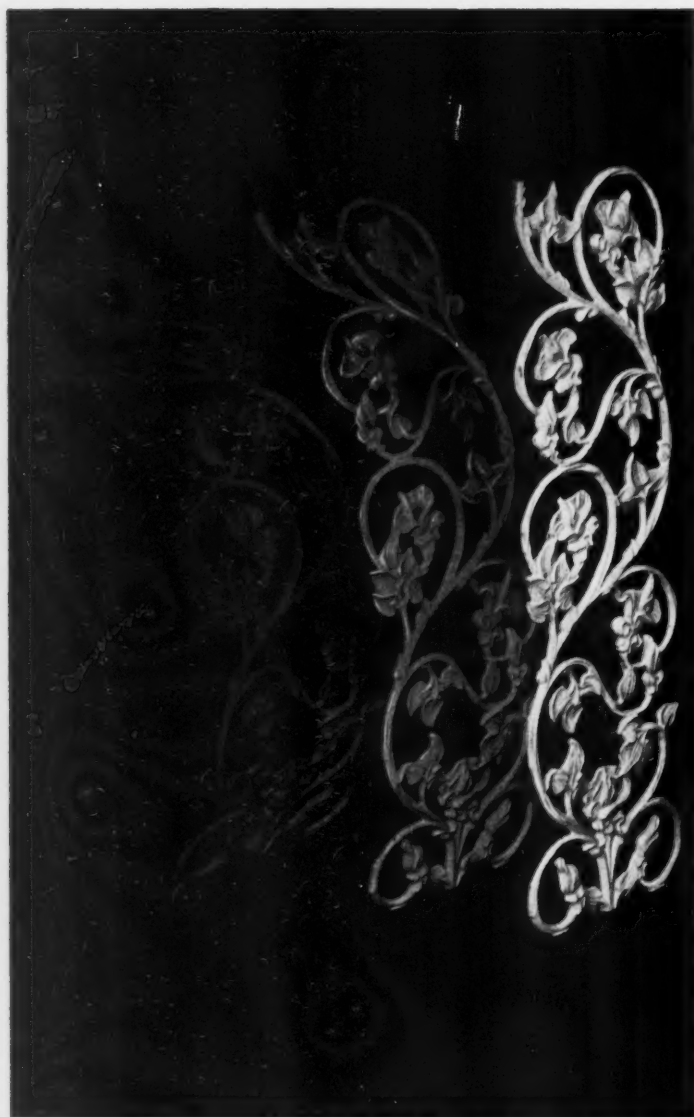
### CONTEMPORARY DESIGNS IN LIGHTING FIXTURES

MFR'S DESCRIPTION: contemporary pendant designs that can be used singly, in pairs, or clusters of three matching or mixed designs.

USES: commercial and residential applications.

SPECS/FEATURES: assortment of spreader kits and new designs makes possible unlimited number of original arrangements. Pendant (M-1450) at left, features cocoa finish to hand-blown opal glass shade, 11" long, 7 1/4" diameter. Cone-shaped pendant (M-1451) right, has crystal-ice finished outer cone and hand-blown

Circle 113 for further information



## THE BEAUTIFUL DRESDEN DESIGN: non-shattering, malleable iron

Julius Blum's ornamental castings bend without breaking. Absence of breakage in handling, fabrication or from accidental blows assures permanence and economy. Blum's quality in ornamental treillage is uncompromising. Look for the finely-patterned details, be assured of getting non-shattering quality by buying Julius Blum malleable iron castings.

Over 70 beautiful patterns stocked for immediate shipment. See Catalog No. 8 or Sweet's Architectural File No. 6e/BL. Phones: Carlstadt, New Jersey, GEneva 8-4600; Philadelphia, MArket 7-7596; New York, OXford 5-2236

JULIUS BLUM & CO. INC., CARLSTADT, NEW JERSEY



**JB\***  
*Fifty Years*  
1910-1960

\*TRADEMARK

Circle 114 for further information

34

## PRODUCTS, EQUIPMENT, MATERIALS

opal glass inner core. Both fixtures have polished brass finish; adjust 72" over-all; one 60 watt bulb recommended.

AIA FILE NO. 31-F-23

MFR: MOE LIGHT DIV., THOMAS INDUSTRIES INC.

Circle 206 for further information

### DIM, MEDIUM, & BRIGHT LIGHTING ON ONE SWITCH

MFR'S DESCRIPTION: *Two Circuit Touchette* added to line of touch type switches.

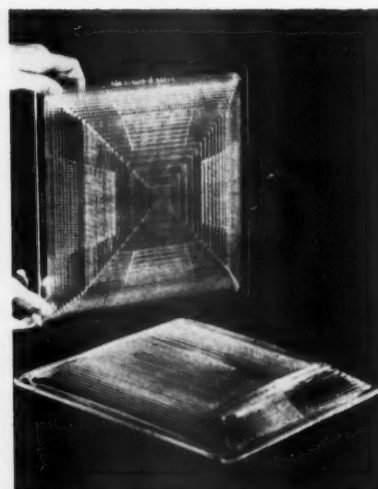
USES: three-light lamps, two separate banks of lights, or two separate circuits.

SPECS/FEATURES: only one switch needed to control above "uses." Switch will carry 1800 watts at 120 volts, 4100 watts at 277 volts, thereby enabling single switch control of large banks of lights. Allows for smaller wire requirements, less switch boxes, and smaller wallplates. At first touch of switch button, first circuit makes contact providing dim light; at second touch, second circuit is activated providing brighter light; third touch brings both circuits into play providing full brightness. Fourth touch breaks contact completely on both circuits. Fluorescent fixture installations, cove and valance lighting for entire rooms may be controlled from one switch location. Mfr stresses customer convenience and contractor economy.

AIA FILE NO. 31-D-4

MFR: RODALE MFG. CO., INC.

Circle 207 for further information



### GENERAL AREA LIGHTING LENS

MFR'S DESCRIPTION: commercial lighting lens optically engineered to provide soft, even light between fixtures.

USES: commercial including offices, hotels, hospitals; open areas such as lobbies, lounges, and waiting rooms; schools; and exteriors.

SPECS/FEATURES: *Pyrex* brand general area lighting lens is made of tempered glass for increased mechanical strength and high heat resistance. Lens is 10 7/8" square with convex contour. It matches *Corridor* lens in size and shape and can be used in same incandescent fixture and with same optically designed reflector. Whether lighted or unlighted, lens provides pleasing appearance in any decor, according to mfr. When installed, panel drops below ceiling line, directing some illumination toward ceiling. Lens is prismatically engineered to give uniform light for unit spacings up to one and one-half times mounting height. Prismatic pattern eliminates shadows along diagonal angles. Lens can be used with up to 300 watt lamps, either inside or outdoors, without damage from impact or heat-shock, mfr states.

AIA FILE NO. 31-F-24

MFR: CORNING GLASS WORKS

Circle 208 for further information

### PLASTIC APPLICATIONS

#### COMPLETE SIZE RANGE IN ORNAMENTAL PLASTIC

MFR'S DESCRIPTION: complete range of available sheet sizes in 3/4" thick *Flakeboard* announced.

USES: wall and countertop surfaces. SPECS/FEATURES: sizes match mfr's decorative laminate sheets. Available lengths: 60", 72", 84", 96", 120", and 144". Widths: 24", 25 1/2", 30", 36", and 48". In addition to 3/4" thickness, it is also available in thicknesses of 3/8", 1/2", 5/8". Mfr also announces addition of *Putty grey*, neutral decorator color to laminate line.

AIA FILE NO. 24-F

MFR: FORMICA CORP., SUBSIDIARY, AMERICAN CYANAMID CO.

Circle 209 for further information

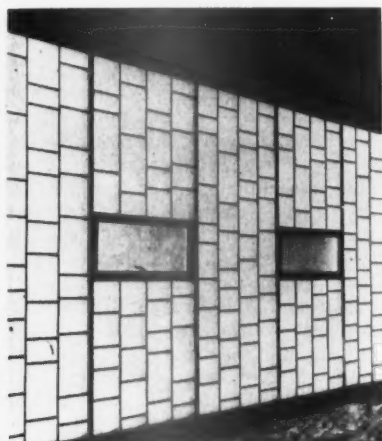
#### FIRE-RETARDANT DRAPERY FABRICS

MFR'S DESCRIPTION: fire-retardant, vinyl drapery fabric in variety of patterns.

USES: residential, office, theatrical, commercial, and institutional decorating.

SPECS/FEATURES: tri-dimensional *Vic-trex* patterns are bonded, in a special weight vinyl, to glass-cloth backing. Fabric is reported to be unaffected by atmosphere and climate, will never fade, crack, snag, or stain. Full dimensional stability is claimed

even after many years hanging. Will wipe clean with damp cloth.  
AIA FILE NO. 28-D-1  
MFR: L. E. CARPENTER & CO.  
Circle 210 for further information



#### DESIGN ADDITION TO TRANSLUCENT BUILDINGS

MFR'S DESCRIPTION: design addition to plastic and aluminum translucent buildings.

USES: wood, masonry, and curtain wall construction.

SPECS/FEATURES: manufactured in sizes up to 4' wide by 20' high, the panels achieve over-all random effect by varying distances between mechanically interlocked aluminum I-beam extrusions which form core of panel. High-tensile-strength fiberglass reinforced polyester sheets are permanently bonded to core to form panel that is lightweight (1.5 pounds per square foot) and structurally strong. Panel is incorporated in panel unit wall system, which combines translucent panels, opaque panels, fixed or operating sash, and louvers into prefabricated panel units. Panels require only perimeter fastening to building—eliminating expensive subframing and supporting members. Design flexibility in color is achieved through wide variety of color faces available, and through use of colored inserts in grid openings.

AIA FILE NO. 23-G

MFR: KALWALL CORP.

Circle 211 for further information

#### SLIDING UNITS

#### MASSIVE WOOD PANEL FOLDING PARTITIONS

MFR'S DESCRIPTION: folding partition that combines panel dimensions of 10 3/8" x 1 1/8" with genuine wood veneers.

USES: general interior applications.

SPECS/FEATURES: partitions can be installed as space dividers in openings of any width and heights up to



introducing  
the all-new

**RIDGWAY'S**

**MEDALIST**

AS PICTURED

**\$12.25\***



A RIDGWAY'S QUALITY DRAFTING SET

The Medalist Drafting set is precision-engineered for the most exacting mechanical drawing and produced exclusively for Ridgway's by the finest German craftsmen. Large (6 1/2") compass extends to 11" diameter with extension bar, and has threaded needle-point for finest possible adjustment. Set also includes three-inch compass-divider, 2 divider-point holders, 2 pen tips, 2 pencil tips, drafting pencil, screwdriver, lead holder.

Use the coupon below to order your Medalist Set, or to secure further information. As always, Ridgway's stands behind its products and services.

#### THERE'S A RIDGWAY'S NEAR YOU

in HOUSTON, TEXAS  
615 Caroline  
3800 Greenbriar  
Bank of the Southwest Arcade

in AUSTIN, TEXAS  
309 W. 10th Street

in CORPUS CHRISTI, TEXAS  
516 Lawrence

in DALLAS, TEXAS  
933 N. Central Expressway  
933 Republic National Bank

in NEW ORLEANS, LA.  
433 Dryades Street

in SHREVEPORT, LA.  
719 Marshall Street  
Petroleum Tower Building

in TULSA, OKLA.  
701 S. Cincinnati  
5925 East 15th

in JACKSON, MISSISSIPPI  
103 East Pearl

in IRVINGTON, N. J.  
1206-16 Grove Street

in CHICAGO, ILLINOIS  
10130 Franklin Avenue  
Franklin Park

in DENVER, COLO.  
1522 Glenarm Place

in LOS ANGELES, CALIF.  
590 So. Monterey Pass Road  
Monterey Park

in NEW YORK, NEW YORK  
110 W. 42nd Street  
216 E. 49th Street

in FORT WORTH, TEXAS  
309 Main Street  
3312 Fairfield

275 OTHER DEALERS COAST-TO-COAST

*Ridgway's*

\*introductory price only, regularly \$18.00

- ☐ Please send me \_\_\_\_\_ Medalist Set(s) at the introductory price of \$12.25 per set. Check or money order for \$\_\_\_\_\_ enclosed.
- ☐ Please send me further information on Ridgway's all-new Medalist Set.

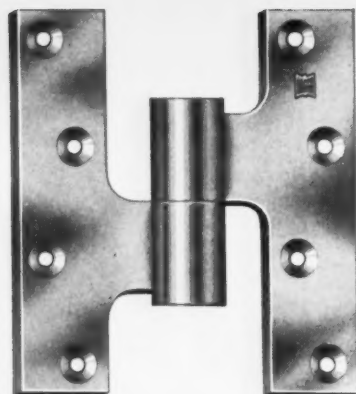
NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

Circle 115 for further information





(Invisible pivot: 1/4" Stainless Steel pin, oilite bushing; greater ball bearing surface.)

FLAWLESS APPEARANCE  
PERFECT PERFORMANCE

## THE HAGER NEW EXECUTIVE...

...the pivot hinge with the **Decisive design!**

*Impressive "pillars of Hercules" Simplicity!*

use 3 on important portals

The architectural accent is appropriately modern; the new Hager EXECUTIVE Hinge gives a fleeting, but definite impression of strength. It comes from clean, uncluttered design... from a massive new dimension in knuckle size.

You sense, without leaf exposure, that these unetched, untipped "pillars of strength" will competently swing a massive heavy wood or metal door — forever!

For a subtle, masculine motif specify the  
HAGER EXECUTIVE

Both Styles available in WROUGHT Bronze  
#BB 293, Stainless Steel #SSBB 293, or  
WROUGHT Steel #BB 1143.



available in  
2 knuckle styles



the Executive  
**TRUNCATED**

flat planed ends at  
90° to perpendicular.  
Specify Detail A.



the Executive  
**DOMED**

dome-shaped ends.  
Specify Detail B.

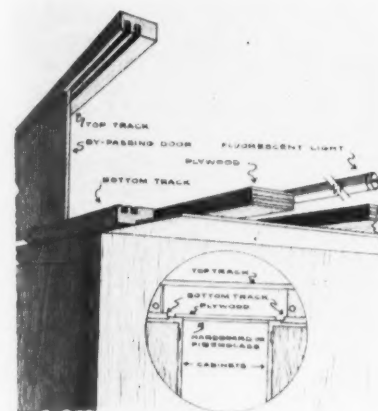
## PRODUCTS, EQUIPMENT, MATERIALS

20' 1". Available either factory-finished or unfinished in six genuine wood veneers: birch, walnut, ash, oak, Philippine mahogany, and pine. Unfinished partitions can be painted or finished to specifications on the job. Stable core panel construction is stated to prevent warping and assure permanent panel straightness. Patented system of steel springs serve as "live action" hinges between panels and helps maintain perfect alignment of panels. With about one pound pressure per panel, even heaviest units are said to glide quietly and easily on ball bearing rollers in a steel ceiling track without need of floor track or guides. Stacking space is about 1 1/2" per foot of opening width. Wide choice of track and end post arrangements available.

AIA FILE NO. 35-H-6

MFR: ROLSCREEN CO.

Circle 212 for further information



### ALL WOOD SOFFIT TRACK

MFR'S DESCRIPTION: all wood soffit track now available.

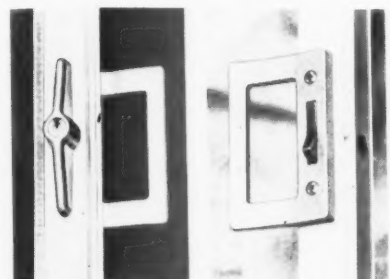
USES: kitchen installations.

SPECS/FEATURES: track, both top and bottom, is finished in natural birch or salem-nutmeg to match mfr's *Country Kitchen* in alder, and also in sunset-cherry to match mfr's *Cosmopolitan Kitchen*, also in alder. Bottom track nails to top, front edge of cabinets. Top track nails to ceiling. Both tracks are grooved to receive 1/4" hardboard sliding doors for access to storage space above cabinets. Permanent fascia can be installed in grooves. Track is available in 8' lengths. Grooves are sized so that

C, HAGER & SONS HINGE MANUFACTURING COMPANY, ST. LOUIS 4, MO. • IN CANADA, HAGER HINGE CANADA LIMITED, KITCHENER, ONTARIO

Circle 116 for further information

sliding doors or fascia board can be stepped into place after track is installed and can be removed just as easily for painting or wallpapering. AIA FILE NO. 35-C-12  
MFR: MAJOR LINE PRODUCTS CO., INC.  
Circle 213 for further information



#### LOW-PRICED SLIDING DOOR

MFR'S DESCRIPTION: budget-priced, sliding glass door called *Challenger*. USES: residential and commercial applications.

SPECS/FEATURES: ball-bearing nylon rollers with two enclosed adjustable sheaves to assure perfect alignment. Decorator hardware is used with thumb latch. Weather-proofed with both mohair and vinyl weatherstripping. Design offers optional installation of keyed locks without special equipment or need for drilling new holes. Also provides maximum adaptability by permitting either right-hand or left-hand installation. Sloping threshold of door prevents seepage; optional stucco trim affords saving in installation costs, mfr states. Double weatherstripping and heavy-duty screens are optional; door is available for both single and  $\frac{5}{8}$ " dual glazing. Mfr stresses low cost of door assemblies.

AIA FILE NOS. 16-N, 27-A

MFR: ADOR CORP.

Circle 214 for further information

#### HVAC

#### CENTRAL AIR CONDITIONING

MFR'S DESCRIPTION: line of central air-conditioning systems engineered to operate efficiently and economically in extended periods of weather over 100°.

USES: residential and commercial.

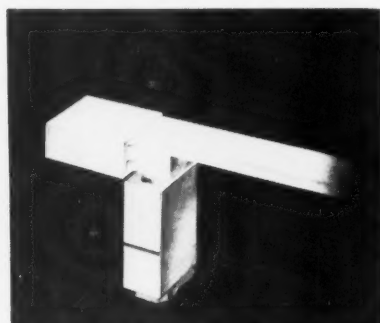
SPECS/FEATURES: manufactured in capacities of 24,000 to 114,000 BTU and rated under the Air Conditioning and Refrigeration Institute standards. Models fall in 2, 2½, 3, 4, 5, 7½, and 10 ton categories. Furnaces from 75,000 to 200,000 BTU capacities offered. Heavy duty compressor is used and an oversize condensing coil with sub-cooling section. Centrifugal blower moves air slowly over coil to assure positive removal of maximum amount of heat. Indoor

components take up only 20" x 28" of floor space for 2 to 5 ton models. Coil section fits on top of furnace. Both have attractive cabinets finished in sandalwood and provincial gold baked enamel. Outdoor section is low in silhouette and finished in neutral tones to blend with any color home. Unit is reported to be extremely quiet in operation due to cushioned compressor, centrifugal blower for low air turbulence, and heavy sound insulation lining cabinet. Automatic, thermostatic controls may be used for automatic or manual operation of *Desert-Tested* systems. Also available is *Weather Station*, control center which gives temperature and humidity levels, outside temperature, barometer, and clock, as well as controls for night setback, regular operation, push button switches for changing from heating to cooling, fan switches, and panel light.

AIA FILE NO. 30-F

MFR: COMMAND-AIRE CORP.

Circle 215 for further information



#### SELF-CONTAINED HEATING AND COOLING SYSTEM

MFR'S DESCRIPTION: *Polar-Solar Pack* is versatile heating and cooling system consisting of two or three hp self-contained air-cooled cooling section short-coupled to forced air furnace.

USES: residential and commercial applications.

SPECS/FEATURES: total of nine belt-driven furnaces may be paired with Model 6210 two hp cooling section. Seventeen models of belt-driven furnaces may be used with larger three hp, model 6215 cooling section. List of approved furnaces includes low-boys, upflow, downflow, and horizontal models. Placement of furnace near outside wall gives almost unlimited application while eliminating need for refrigerant lines, costly transition ducts, and special blower in evaporator section of cooling unit. Extra large, low resistance evaporator coil is sized to furnace blower. Other features include: refrigerant stabilizer; filter-drier; low pressure switch; acoustically treated cabinet

and weather proofing. Arrangement of components and refrigerant circuiting permits field servicing of cooling section.

AIA FILE NO. 30-F-1

MFR: THE COLEMAN CO., INC.

Circle 216 for further information

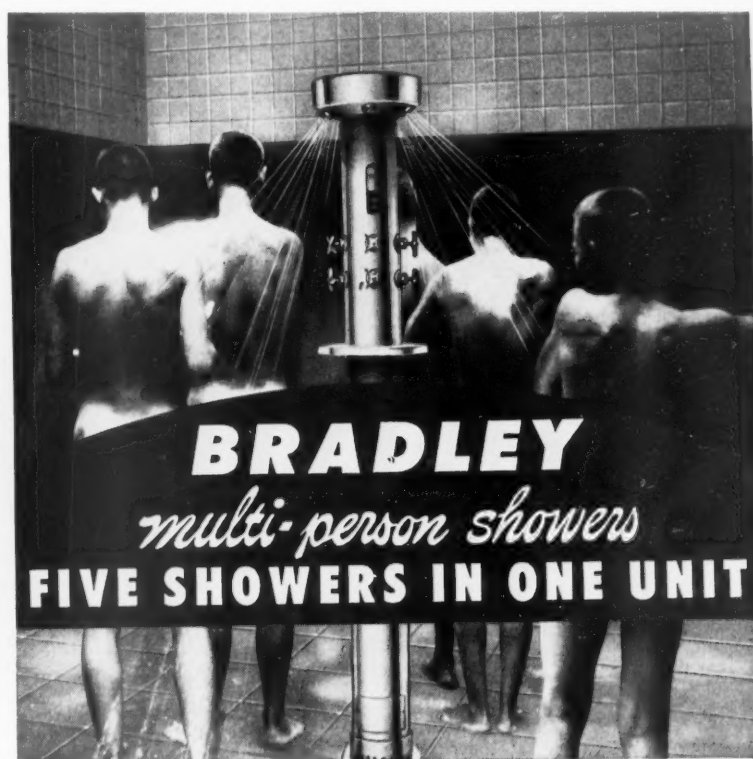
#### ZONE-CONTROLLED SPOT HEATING

MFR'S DESCRIPTION: *Infra-Mite* is compact and handsomely streamlined unit heater for zone-controlled spot heating.

USES: residential, commercial, and institutional spot heating.

SPECS/FEATURES: based on European

concept of radiant heating and utilizing high energy infra-red emitter—a fused quartz element which gives healthful, almost instantaneous warm heating. It concentrates on specific areas without heating surrounding areas. Available in ten models, three sizes (19½", 33", and 39" fixtures), featured are semi-parabolic shaped reflectors and special end reflectors said to deliver a higher heat emission factor and attain a higher heat transfer factor than any other type infra-red heating product on market. 5000 hours of lamp life is guaranteed. Homeowners and commercial users are of-



Shower facilities can now be installed quickly, at low cost and in small space.

Thousands of students in schools and colleges enjoy facilities provided by Bradley Multi-Person Shower Columns as shown above. One column has 5 shower heads—but requires one set of piping connections. Yet each bather has individual control of water volume and temperature. Soap dispensers are also available. For Girl groups,

the same Shower Column is supplied with 5 stall-separating partitions and with curtains for greater privacy if desired.

To insure top sanitary wash and shower facilities—install Bradleys. All models are illustrated in Bulletin H-1322—copy mailed on request.

BRADLEY WASHFOUNTAIN CO.,  
2357 West Michigan Street, Milwaukee 1, Wisconsin.



Same Column with stall-separating partitions and curtains.



Write for  
Bulletin H-1322

Circle 117 for further information

## PRODUCTS, EQUIPMENT, MATERIALS

ferred a highly decorative, small-dimensioned heating fixture with adaptability that allows it to attach right to conduit box in existing electrical system. Ceiling and wall mounted units are available, and portable wall-hanging type, with cord. 19½" fixture is available, 500-watt or 750-watt; 33" model, 1000-watt, 1200-watt, 1450-watt; and 39" unit, 2000-watt. Models are U.L. approved. Mfr stresses that units protect against shocks and burns; can't be harmed by water; are thermal-shock resistant. All electrical parts are covered and completely sealed. Provided is protective grill facing with option of brass or chromium plating.

AIA FILE NO. 30-C-44

MFR: APEX PRODUCTS CO., DIV.,  
APEX SHEET METAL WORKS, INC.

Circle 217 for further information

### ELECTRIC AIRDUCT HEATERS ANNOUNCED

MFR'S DESCRIPTION: production announced of two series of *Chromalox* electric airduct heaters.

USES: type FFT for installation in existing ductwork; type FTD for installation as part of new ductwork. SPECS/FEATURES: both series feature *Chromalox Fintube* metal-sheath element which has ceramic coating to prevent corrosion even after long exposure to high-humidity summer air. Both series have heavy-gauge, corrosion resistant terminal boxes and frame parts spot-welded into rigid assembly. U.L. listed, heaters range in capacity from two to 100 kilowatts with voltage ratings from 120 to 550. Standard sizes are stocked and special sizes are available up to 28" x 48" duct size and in ratings up to 10.7 kilowatts per square foot of duct area.

AIA FILE NO. 31-K

MFR: EDWIN L. WIEGAND CO.

Circle 218 for further information

### FAST-ACTING AIR VENT

MFR'S DESCRIPTION: #8 *Float Air Vent* for hydronic systems.

USES: used at all high points of hot water heating or chilled water systems to effectively eliminate air that would otherwise seriously interfere with circulation.

SPECS/FEATURES: vent has ⅛" I.P.S. male inlet and comes equipped with special outlet connector for ¼" o.d. copper overflow. It is constructed

# MAHON CURTAIN WALLS...in natural or colored metals...



Circle 118 for further information



A creative example of the design flexibility inherent in Mahon Curtain Walls is shown in the recently completed Friedland Research Center of Brandeis University at Waltham, Mass. Here, standard components (Mahon Insulated Curtain Wall in a 1½-inch prefab flush panel of mill-finish aluminum) have the eye-appeal of a custom-designed wall system and the budget-appeal of a readily available building product. Architects for the Center were: Shepley, Bulfinch, Richardson and Abbott, Boston, Mass. General Contractor: Lilly Construction Company, Boston, Mass.

## provide striking design opportunities— surprising cost-cutting possibilities

Mahon Curtain Walls also have carefully worked out functional advantages—they can be erected up to 60 feet in height without a horizontal joint . . . vertical joints are invisible. They are quality made for long life, easy installation, low maintenance and rain-shower cleaning. These advantages can be applied to your industrial, commercial and institutional projects . . . they mean architectural benefits, client benefits. To learn how Fiberglas-insulated metal curtain walls from Mahon can fit into your work, contact your local Mahon representative, write for informative catalog W-60, or see Sweet's Files.

### Mahon Building Products

- Aluminum or Steel Curtain Walls (in natural or colored metals)
- Rolling Steel Doors (Standard or Underwriters' labeled)
- Metalclad Fire Walls (Underwriters' rated)
- M-Floors (Steel Cellular Sub-Floors)
- Long Span M-Deck (Cellular or Open Beam)
- Steel Roof Deck
- Acoustical and Troffer Forms
- Acoustical Metal Walls, Partitions and Roof Decks
- Permanent Concrete Floor Forms

### Construction Services

- Structural Steel-Fabrication and Erection
- Steel Fabrication-Weldments
- Geodesic Domes-Fabrication and Erection

Mahon Curtain Walls are supplied in galvanized, porcelainized, enameled or stainless steel, and in aluminum in many finishes—each in three types.

### THE R. C. MAHON COMPANY / DETROIT 34, MICHIGAN

Manufacturing Plants—Detroit, Michigan and Torrance, California  
Sales-Engineering Offices in Detroit, New York, Chicago, Torrance and San Francisco  
Representatives in all principal cities.

SPEEDING AMERICAN CONSTRUCTION WITH METAL BUILDING PRODUCTS,  
FABRICATED EQUIPMENT AND ERECTION SERVICES

# MAHON

FLUTED—field constructed

RIBBED—field constructed

FLUSH or FLUTED PREFAB PANELS

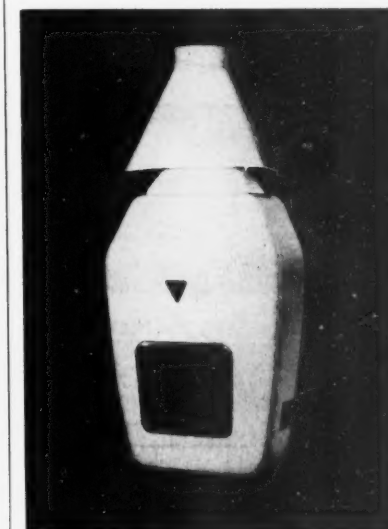
## PRODUCTS, EQUIPMENT, MATERIALS

of noncorrosive metals, having heavy brass shell, copper float, stainless steel needle seat, and special composition ring seal that assures tight shut off. Vent is suitable for up to 50 pounds working pressure and, while it is quality item, it is priced competitively, mfr claims.

AIA FILE NO. 30-C-13

MFR: H. A. THRUSH & CO.

Circle 219 for further information



### WALL-MOUNTED GAS BOILER

MFR'S DESCRIPTION: model 924 hydronic boiler featuring case design in sturdy, smart looking vitreous enamel.

USES: basic housing in medium and high cost range.

SPECS/FEATURES: fully A.G.A. approved at 120,000 BTU's, model has following specifications: (1) Input (B. Th. U./Hr.), 115,000 L.P. gas, 120,000 natural gas; (2) Output (B. Th. U./Hr.), 92,000 L.P. gas, 96,000 natural gas. Control package features Basotrol combination valve unit which incorporates automatic pilot, automatic main valve, and pressure regulation in one compact unit for greater efficiency in space and operation. Penn high limit control is used.

AIA FILE NO. 30-C-1

MFR: ASCOT GAS WATER HEATERS, INC.

Circle 220 for further information

### OFFICE AIDS

### BLACK BALL PENS WITH ERADICATOR

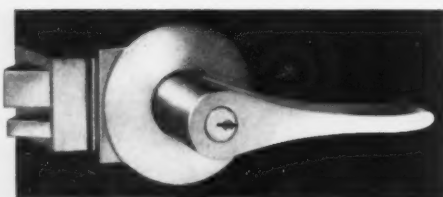
MFR'S DESCRIPTION: instant drying, Engineer's Black ink is non-trans-

Circle 118 for further information

for  
"unit-built"  
locks . . .

## russwin doorware

The Russwin Beaulieu Design Uniloc — installs as a factory assembled unit in a shallow notch in the door. Rugged construction throughout. Smart new lever handle design. A symphony in lockmaking. For details on complete line, write Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.



Circle 119 for further information



### Barber-Colman continuous-line diffusers have beauty plus "brains"

Only Barber-Colman continuous-line diffusers have the exclusive Uni-Flo core that assures a high rate of aspiration with control of pattern, direction, and sound level. They are *guaranteed* to perform in accordance with published laboratory performance data. Drafts and discomfort that usually result from grilles which simply "pour" a stream of air into the room are eliminated.

Available with attractive wide- or narrow-flange aluminum frames in a variety of finishes for floor, sill, side-wall, or soffit installation. Sizes range from 1½" through 4" height in ½" increments. Standard models include choice of 5° or 15° vertical air deflection up or down. Wide-flange models can be equipped for horizontal air adjustment. Ask for new Catalog F-7757.



**BARBER-COLMAN COMPANY**

Dept. 1, 11124 Rock Street, Rockford, Illinois

Circle 120 for further information

## PRODUCTS, EQUIPMENT, MATERIALS

ferable and can be eradicated with application of *Ink-Away*.

USES: engineering, drafting, and art departments.

SPECS/FEATURES: wide range of colored inks in addition to black can be quickly eradicated without paper distortion. Available in number of combinations of black, blue, green, red, orange, yellow, pink, lavender, and purple blue plus eradicator container.

AIA FILE NO. 35-H-3

MFR: INK-AWAY PRODUCTS CO.

Circle 221 for further information

### MULTI-USE OVERLAY & OPAQUING MEDIUM

MFR'S DESCRIPTION: adhesive-backed, transparent film.

USES: masking, blocking, or opaquing in preparation of artwork, blueprints, photo negatives and positives.

SPECS/FEATURES: dimensionally stable *Para-Paque* is light-safe, deep red film that completely blocks passage of light even up to 15 times normal exposure, mfr states. Tested on 150 watt blueprint and whiteprint machines down to one-half foot per minute. Highly transparent, facilitating fast, easy accurate use in overlays and opaquing. User lays on a sheet, cuts, and peels it away. No painting in or scratching out is needed. Adhesive-backed with heat-resistant *Blu-Zip* withstanding temperatures up to 250° F. Available in two sizes, packaged in five sheets to envelope, retailing for 80¢ per sheet in 10" x 14" size and \$1.25 in 18" x 24" size.

AIA FILE NO. 35-H-3

MFR: PARA-TONE INC.

Circle 222 for further information

### COATINGS/SEALANTS

#### MEMBRANE FILM FOR PROTECTIVE COATINGS

MFR'S DESCRIPTION: true epoxied-vinyl formulation especially adaptable as water-vapor barrier under or above ground.

USES: general building construction and maintenance.

SPECS/FEATURES: although *Ren-Coat* is usually applied in six to ten mil thicknesses, applications are possible up to 40 mils on ferrous and non-ferrous metals, masonry, concrete, wood and other types of surfaces. Each mil is stated to be equivalent of one year of wear. All purpose primer enables elastic film to bond tenaciously to surface so as not to disturb adhesion between coating



## WHO BUYS "HALF-A-DOOR"?

Nobody does, intentionally. But, any industrial door worth having is and **MUST** be part of a "package". And, that "package" must include a worthwhile guarantee and available after-service to keep that door in tip-top working condition through the many years that a good door will last.

Anybody who settles for less is getting only "half-a-door". And the fact that it had a bargain-counter price tag on it is no comfort when the door is out of commission (perhaps through a truck backing into it) and the owner has an emergency on his hands until the door is fixed.

We know, because our dealers get plenty of calls to service such doors and, sometimes, to replace the complete installation because the owner simply can't take it any more.

The answer, of course, is to buy doors **ONLY** from a known company with an established product backed by a real guarantee and complete service facilities. Then, you know you're going to be happy.

If you choose Crawford, you can get even more—you can get **PREVENTIVE MAINTENANCE SERVICE** which, like the lubrication of your car, stops certain kinds of trouble before it has a chance to happen.

And, you can buy this **P.M.S.** on contract so that it is automatic, which is a good deal for you because your doors are looked after by *professionals* **ALL** the time. **P.M.S.** covers your door operators, too.

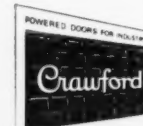
Your local Crawford Door Dealer, listed in both the White and the Yellow Pages, will be glad to tell you more. Or, drop us a line here at Industrial Door Headquarters. Crawford Door Company, 20263-1 Hoover Road, Detroit 5, Michigan.

# Crawford

**INDUSTRIAL DOORS  
and DOOR OPERATORS**

Quality and Service for over 30 Years

Circle 121 for further information  
Architectural & Engineering News



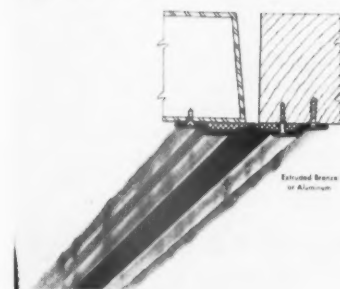
## PRODUCTS, EQUIPMENT, MATERIALS

and surface. Unaffected by temperatures between  $-65^{\circ}$  and  $150^{\circ}$  F, porosity free, it can be washed easily with mild detergents and warm water. It shows excellent resistance to alkali, mineral acids, oils, plasticizers, alcohols, aliphatic hydrocarbons, aromatic carbons, fresh and salt water, and most organic acids.

AIA FILE NO. 24-B

MFR: REN PLASTICS, INC.

Circle 223 for further information



### WEATHERSTRIPPING FOR MEETING STILES

MFR'S DESCRIPTION: prevention of drafts, exclusion of dirt and dust, and compensation for expansion and contraction of doors are stated to be achieved by #50M weatherstripping. USES: all metal and wood doors in institutional and commercial installations where unimpeded passage is required.

SPECS/FEATURES: door-height neoprene strips,  $\frac{1}{8}$ " thick, are held firmly in place on each door edge by extruded bronze or aluminum retainer. Complete vertical sealing is achieved, regardless of which door closes first, since neoprene strips overlap at least  $\frac{1}{16}$ ". Effects of expansion and contraction are overcome by mounting weatherstripping to provide minimum of  $\frac{1}{4}$ ", maximum of  $\frac{1}{2}$ " of clear space between meeting doors. Catalog of mfr's complete line of astragal units available.

AIA FILE NO. 35-P-6

MFR: ZERO WEATHER STRIPPING CO., INC.

Circle 224 for further information

### QUICK-DRYING POOL COATING

MFR'S DESCRIPTION: coating for swimming pools which is said to end blistering and peeling of pool floors and sidewalls.

USES: finish for cement, gunite, concrete and other types of commercial and backyard pools.

SPECS/FEATURES: Consolite contains special alkyd resin and is impervious to water and chemicals used in pools. One application is stated to provide

year-round protection, safety, and pool beauty. Quick-drying properties permit almost instant swimming. Pools can be filled within hours after coating has been applied. Available in range of colors. One gallon covers about 300 square feet. In five gallon pails, it lists at \$7.50 per gallon. Color chips available.

AIA FILE NO. 24-B

MFR: CONSOLIDATED PAINT & VARNISH CORP.

Circle 225 for further information

### COLORFUL WALL GLAZE TREATMENT

MFR'S DESCRIPTION: permanent, class "A" flame resistant, surface finish for all types of building materials.

USES: exterior applications.

SPECS/FEATURES: Vise is reported to be water resistant. Temperature and humidity cause no effect; fungus does not react; no appreciable wear on face of material when subjected to 5,000 cycles of taber abrader using CS10 wheel under 1000 gram load, mfr states. Over 42 basic colors available in variety of combinations. Can be applied either flat or with textured finish. Mfr stresses low cost of wall treatment.

AIA FILE NO. 26-B

MFR: CAST-O-BRICK CORP.

Circle 226 for further information

### COMMUNICATION SYSTEMS



### NOISELESS OFFICE PAGING SYSTEM

MFR'S DESCRIPTION: *In-dicator*, is "in-and-out" system which keeps track, noiselessly, of key office and sales personnel.

USES: small to medium sized offices, banks, plants, and in departments of larger organizations.

SPECS/FEATURES: system contains

three elements; ten or twenty-name register, compact indicating panel, and low-voltage transformer. Register can be installed near any convenient entrance, while indicating panel is placed atop reception desk or telephone switchboard. For remote locations, single-name executive registers are also available. When entering building or office, key personnel flip the register switch associated with their names to "in" position. When visitor or phone call is received, receptionist or operator, presses button on indicating panel corresponding to name of person wanted. If he is in, green lamp will

light; if he is out, red lamp will light. When leaving, either during or at end of day, personnel flick their register switches to "out" position. At remote locations, executives indicate their absence or presence. For privacy, executives can flip their switches to "out" position. In addition to monitoring coming and going of personnel, system can also be used wherever simple "yes" or "no" answers are required. Installation is stated to be easy. All components are factory pre-wired. Registers— $4\frac{1}{2}$ " x  $6\frac{1}{4}$ " x  $1\frac{1}{2}$ "—can be either flush or surface mounted (ten name unit fits in standard three-

## FOUR DISTINCTIVE HAWS FOUNTAINS SMARTLY STYLED IN VITREOUS CHINA



"The Series 60"...refreshing new styling with the durable beauty of gleaming vitreous china, permanently in good taste. All are wall-hung models, based on the same appealing design. Choose the model that best fits your plans...or choose several to complement each other in varied locations. Sanitation? Only HAWS has the exclusive M fountain head...raised, shielded, anti-squirt angle stream. Automatic flow control, too. Get detailed specs from HAWS. Write today.

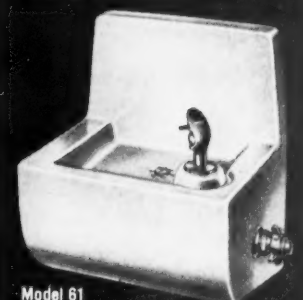


Model 62-GF: HAWS glass filler faucet installed on back of Model 62, for double-duty convenience.

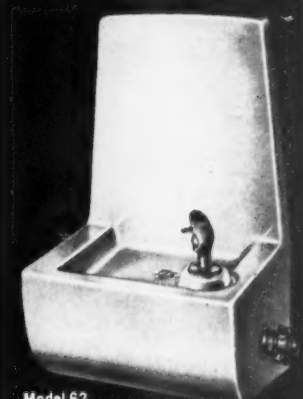
Ask for your free copy of the new HAWS Catalog.



Model 60



Model 61



Model 62



DRINKING FAUCET COMPANY

1441 FOURTH STREET (Since 1909) BERKELEY 10, CALIFORNIA

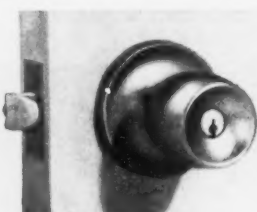
Circle 122 for further information



for heavy-duty  
cylindrical  
locks...

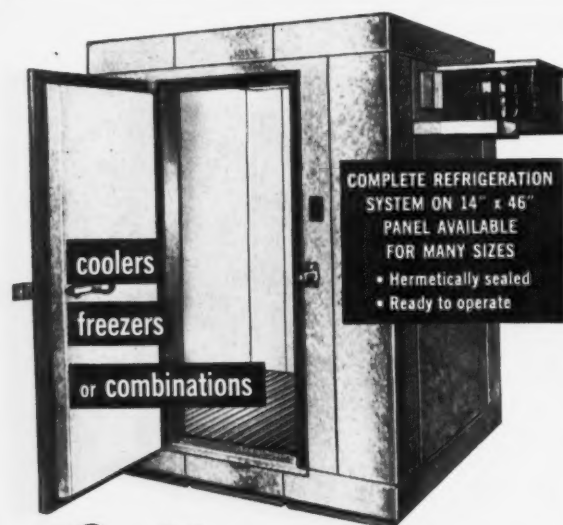
## russwin doorware

The Stilemaker Comet Cylindrical Lock — Beauty and brawn! Heavy-weight construction... smart, modern styling. Abuse-proof: Heavy steel chassis, seamless tubular shank, 3-point shank bearing. For details on complete line, write Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.



**RUSSWIN**

Circle 123 for further information



## Bally walk-ins

Aluminum or steel sectional construction

Sanitary! Strong! Efficient! You can assemble any size cooler, freezer or combination in any shape from standard sections. Add sections to increase size as your requirements grow. Easy to disassemble for relocation.

**Bally Case and Cooler, Inc., Bally, Pa.**

Get details—write AN-9 for FREE book.

Circle 124 for further information

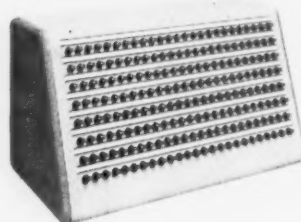
## PRODUCTS, EQUIPMENT, MATERIALS

gang boxes, while twenty-name units can be mounted in six-gang boxes.) Indicating panels—3" x 3 1/4" with inclined, satin-finished faces to insure clear visibility—require no mounting. Operating on 24 volt 60 cycle power, new system is stated to be completely safe and usually does not require electrical permit for installation. Meets class 2 requirements, article 725, of National Electrical Code. Ten-name systems priced from \$110, complete.

AIA FILE NO. 31-i-12

MFR: EDWARDS CO., INC.

Circle 227 for further information



### MESSAGE WAITING SERVICE FOR HOTELS

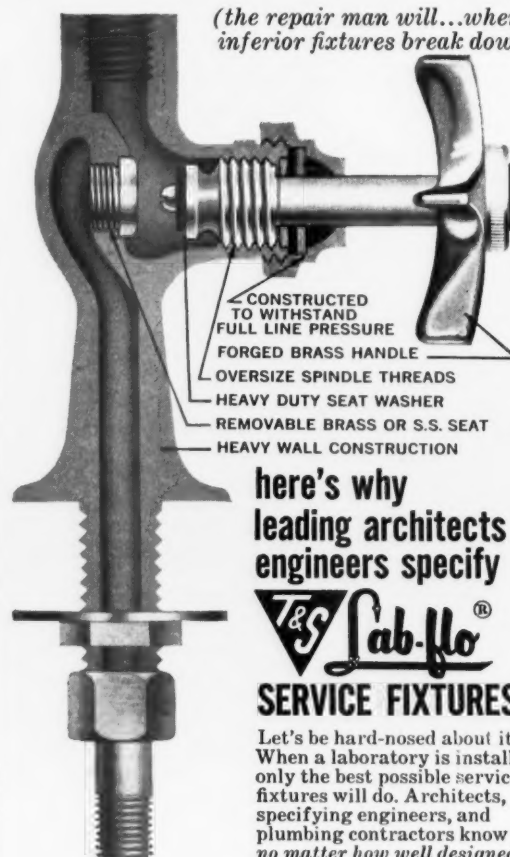
MFR'S DESCRIPTION: system for getting messages to hotel guests.

USES: hotels.

SPECS/FEATURES: service features flashing lamp on guest's room telephone which informs him that message is on hand at PABX switchboard. Lamp is triggered by turn of key. In small hotels, locking turnkeys are mounted on switchboard, one key for each telephone. In larger establishments, PABX attendant may be freed of handling message waiting calls by special *Message Service Control Unit*. Compact cabinet contains keys for 100 or 200 phones. Additional units may be provided. When PABX attendant receives request to deliver message, lamp on guest's phone may be activated or call routed to *Message Service Control Unit*. By calling designated number, or message service clerk, guest receives his message. Service does not affect normal telephone use. Guest may answer incoming calls or place outside calls. To stop flashing light, however, he must call attendant, who restores turn-key to non-operated position. Control unit equipment, contained in modern, trimline metal wrap-around cabinet, is 16" high, 11 1/2" deep, and 21 1/2" in length.

## LOOK "UNDER THE HOOD" of LABORATORY SERVICE FIXTURES

(the repair man will...when inferior fixtures break down)



CONSTRUCTED TO WITHSTAND FULL LINE PRESSURE  
FORGED BRASS HANDLE  
OVERSIZE SPINDLE THREADS  
HEAVY DUTY SEAT WASHER  
REMOVABLE BRASS OR S.S. SEAT  
HEAVY WALL CONSTRUCTION

here's why  
leading architects and  
engineers specify

**T&S Lab-flo**

### SERVICE FIXTURES

Let's be hard-nosed about it. When a laboratory is installed, only the best possible service fixtures will do. Architects, specifying engineers, and plumbing contractors know it no matter how well designed the science equipment is, it will operate only as well as its fixtures.

It's a fact that there are important differences in fixtures used for laboratory furniture and it takes such experts to recognize them—even the busy repair man on his frequent trips to replace ordinary washers, re-grind worn seats, or to install whole new units because of stripped threads. That is why T&S Lab-Flo Service Fixtures, heavy duty engineered and constructed throughout especially for laboratory use, are preferred for wood or metal installations of any size or design. Lab-Flo is built for strength, safety, and ease of handling in the laboratory. No thin walls or shallow threads to break down, no weak parts to give out when full line pressure is applied. Look at a cross-section of a Lab-Flo fixture and you will see a cross-section of quality at its finest. You pay for quality—why not get it? You will...when you specify Lab-Flo right down the line on your next laboratory installation, new or remodeled.

THOSE IN THE KNOW SPECIFY **Lab-flo**

See your **Lab-flo** dealer or write for Catalog

SERVICE FIXTURES • HOSE COCKS  
REMOTE CONTROLS • RECEPTACLES  
Refer to 1960 Sweet's Catalog, Code: 27b  
Ta



**T & S BRASS AND BRONZE WORKS, INC.**  
128 MAGNOLIA AVE., WESTBURY, L.I., N.Y.  
Telephone: EDgewood 4-9104



Circle 125 for further information

Architectural & Engineering News

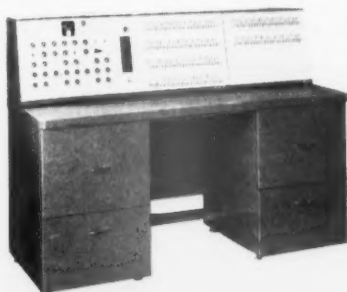
## PRODUCTS, EQUIPMENT, MATERIALS

Unit is available in gray, with designation strips for room numbers. *Message Service* telephones, in black, and 10 colors, are also available.

AIA FILE NO. 31-i-12

MFR: AUTOMATIC ELECTRIC, SUBSIDIARY OF GENERAL TELEPHONE AND ELECTRONICS

Circle 228 for further information



### SOUND/COMMUNICATIONS SYSTEMS FOR SCHOOLS

MFR'S DESCRIPTION: sound, programming, and communication systems for schools housed in desk-type central console.

USES: institutional applications.

SPECS/FEATURES: systems are made up of mass-produced standard equipment panels assembled to specific requirements. Consoles are finished in blue-gray baked enamel, pearl gray front panels with a transparent "mark proof" coating baked on after painting and silk-screening. Console is 61½" wide. Two pedestals have rollout equipment drawers. Systems provide two or three channels for distribution of phonograph or radio programs, voice announcements to all indoor and outdoor areas. Rooms originate calls by voice or annunciator light. Emergency or disaster switch bypasses all controls and broadcasts at preset volume.

AIA FILE NO. 31-i-7

MFR: RAULAND-BORG CORP.

Circle 229 for further information

### CEILINGS/ROOFS

#### WOOD GRAIN ROOF DECK

MFR'S DESCRIPTION: economically-priced wood grain insulating roof deck stated to enhance appearance of post-and-beam homes.

USES: exposed beam residential construction.

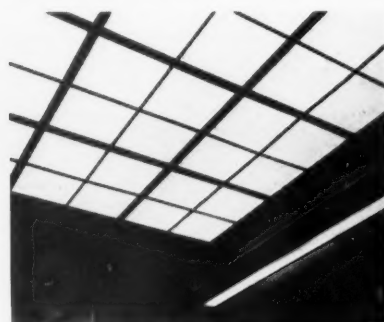
SPECS/FEATURES: mfr states that *Paneldeck*, brings warmth and beauty of expensive waxed hardwood to ceilings, yet is comparable in price to factory-painted roof decks. Deck is finished with authentic walnut grain pattern printed on special,

super-smooth calendered stock. Pattern is laminated to insulating roof deck, then clear resin coat is applied to protect surface and provide easy-to-clean, dirt resistant surface. Paneldeck is scored at 8" centers for planked appearance. Available 2' x 8' in thicknesses of 1½", 2", and 3" with tongue and groove edges. Product is stated to have high thermal insulation value. (K-0.36.)

AIA FILE NO. 17-A

MFR: SIMPSON LOGGING CO.

Circle 230 for further information



#### LAMINATED VINYL CEILING MATERIAL

MFR'S DESCRIPTION: luminous ceiling material enabling architects to design integrated systems for luminous ceilings.

USES: commercial applications.

SPECS/FEATURES: basic material is designed as part of integration of luminous ceiling materials, and requires architect's participation. Translucent material is laminated vinyl in translucencies and colors varying from clear to shades of white, with various fabrics, botanical materials, or textures laminated between plies of vinyl. Thicknesses vary according to design specification from .020 to .125 of an inch. Called *APC Litelam*, it is self-extinguishing. Available in variety of sizes and patterns, and may be integrated into any practical suspension mechanism available or designed by architect. Costs range from 75¢ to \$2.00 per square foot, excluding suspension.

AIA FILE NO. 24

MFR: ARCHITECTURAL PLASTICS CORP.

Circle 231 for further information

#### ACOUSTICAL TILEBOARD WITH HOLES & FISSURES

MFR'S DESCRIPTION: acoustical tileboard with combination of fissures and carefully clustered, tiny, perforated holes.

USES: noise control.

SPECS/FEATURES: each *Fissurelite* tileboard is slightly different. Some

# CUSTOM EFFECTS in ORNAMENTAL GRILLES at low cost!



IRVICO'S mass production of "ALUMINUM GRIDSTEEL" now enables the designer to achieve the "custom look" in grillework economically.

"ALUMINUM GRIDSTEEL" is a honeycomb mesh that allows great flexibility in scale and texture, and diversity of application. Its third-dimension affords varying degrees of opacity depending on angle of view.



"ALUMINUM GRIDSTEEL" is available in rigid or flexible panels of various sizes... anodized, painted or mill finish.

Write for colored brochure

IMAGINEERING in ALUMINUM "GRIDSTEEL"®



# IRVICO

## IRVING SUBWAY GRATING CO., Inc.

ORIGINATORS OF THE GRATING INDUSTRY

Offices and Plants at

5059 27th ST., LONG ISLAND CITY 1, N. Y.

1859 10th ST., OAKLAND 10, CALIFORNIA

Circle 126 for further information

for  
precision-made  
mortise locks

## russwin doorware

The Russwin Ten-Strike Cosmic Design Mortise Lock — Superb quality and styling. All parts precision-made and built for long, trouble-free, heavy-duty service. This versatile lock can be adapted to any function. For details on complete line, write Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.



Circle 127 for further information

### WOOD SIDE-COILING PARTITIONS—BY COOKSON

—Attractive, Practical, Durable



THE PREFERRED PARTITIONS FOR ★ GYMNASIUMS  
★ CAFETERIAS ★ CLASSROOMS ★ CHURCHES ★ FACTORIES  
★ SHOWROOMS ★ STORES ★ STAGES ★ HOMES

Write for  
Bulletin 6003.  
Contains detail  
drawings and com-  
plete architectural  
specifications.



**THE  
COOKSON  
COMPANY**

1525 Cortland Avenue, Dept. AE  
San Francisco 10, California

Sales and Service Representatives  
Throughout the U. S. A.

ALSO STEEL ROLLING & FIRE DOORS • COUNTER DOORS • GRILLES

Circle 128 for further information

## PRODUCTS, EQUIPMENT, MATERIALS

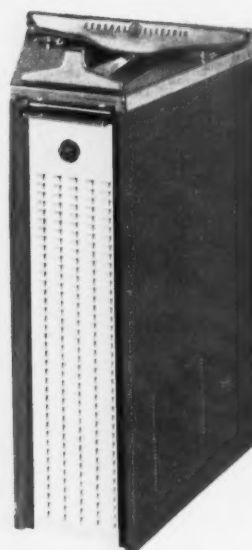
tiles have deep fissures, others have mere surface impressions, others combine shallow and deep fissures. Product has multiple coating of durable, high-brightness paint that provides super-white tile with exceptionally high light reflectivity. Tiles are easily cleanable. Available in  $\frac{1}{16}$ " thickness, size 12" x 12", with flanged tongue and groove joint for application with either staples or nails. Tile comes packaged 56 pieces to carton.

AIA FILE NO. 39-B

MFR: INSULITE

Circle 232 for further information

### PLUMBING UNITS



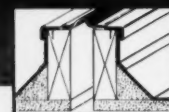
### SPACE-SAVING SHAPE IN WATER COOLERS

MFR'S DESCRIPTION: wall and floor model water coolers which mount flush to wall eliminating plumbing space behind unit.

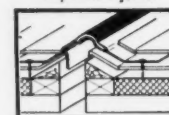
USES: commercial, institutional, and industrial applications.

SPECS/FEATURES: space-saving shape permits drinking from either side as well as front, helping to keep aisles-ways free. All plumbing components are completely enclosed, hidden from view. Units may be mounted at any height or on floor—an advantage for school installations. Special carafe-filler accessory available for restaurant and cafeteria use. Also available is hot-water accessory for addition to installed units. Other features include feather-touch, finger-tip control; removable drain strainer for easy cleaning of high-capacity

## Solve Your EXPANSION JOINT Problems with *Expand-o-flash* with the NEOPRENE BELLOWS



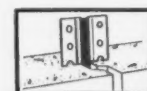
Curb roof  
expansion joint.



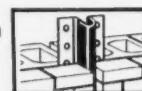
Low profile  
expansion joint.

Expand-o-flash is made of weather-proof flexible neoprene, bonded mechanically and adhesively to metal edging and is installed with totally relaxed neoprene bellows to allow both sides of the joint to move freely in any direction. Stresses and metal fatigue are eliminated.

Expand-o-flash provides a continuous watertight seal all around the building both above and below grade.



Expand-o-flash  
in vertical  
walls.



Shop fabricated corners and crossovers eliminate errors in the field and reduce the cost • No training needed for installation • Literature, engineering data and sample on request • See us in Sweet's.



**LAMONT & RILEY CO.**

300 SOUTHWEST CUTOFF, WORCESTER 7, MASS.

Circle 129 for further information

Specify  
The Best!

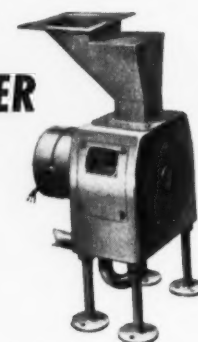
Give your client

**JEFFREY GARBRIDDER**

## FOOD WASTE DISPOSERS

Specifically Designed for:

- SUPERMARKETS
- HOTELS
- DRIVE-INS
- HOSPITALS
- RESTAURANTS
- INSTITUTIONS



ILLUSTRATED  
2 HP MODEL NO. G-64-A for  
dish table or under counter  
installation.

Wherever food is served  
Available in 2, 3, or 5 HP Models

There is a specific Jeffrey GARBRIDDER to solve any food waste problems. Each unit is precision constructed for efficient, economical food waste disposal and long, trouble-free service.

Write, wire or phone TODAY for descriptive brochure and dimensional installation Drawing.

TERMS or LEASING AVAILABLE

The Pioneer in Commercial Food Waste Disposers  
MANUFACTURED FOR OVER 50 YEARS

**UNITED MANAGEMENT CORPORATION**

EXCLUSIVE NATIONAL DISTRIBUTOR

1201 CHASE AVENUE • CHICAGO 26, ILLINOIS  
Telephone ROgers Park 4-1729



Circle 130 for further information

Architectural & Engineering News



## PRODUCTS, EQUIPMENT, MATERIALS

pre-cooler without removing top; no-squirt bubbler; anti-splash basin; glass and carafe filler accessories, etc. Wall width, 17<sup>15</sup>/<sub>16</sub>" ; front width, 8" ; wall to front depth, 15" ; height, 30".

AIA FILE NO. 29-H-1

MFR: GENERAL ELECTRIC CO.

Circle 233 for further information



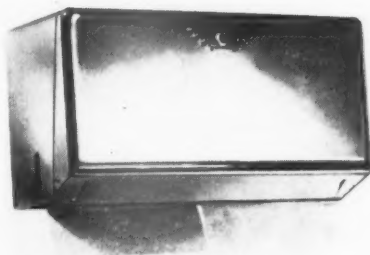
### LINE OF COMPOSITION FIBER PIPE FITTINGS

MFR'S DESCRIPTION: line of four inch pipe fittings made of special composition with high impact strength. USES: general plumbing installations. SPECS/FEATURES: fittings are shatter-proof, root-proof, and exceptionally durable, mfr claims. Fittings are reinforced with fiber glass and have unique texture that is stated to assure tight, waterproof joint and fast. Available in 1/8 bends, 1/4 bends, wyes, and tees.

AIA FILE NO. 29-B

MFR: KYOVA FIBER PIPE CO.

Circle 234 for further information



### TOWEL DISPENSERS AVAILABLE IN CHROME

MFR'S DESCRIPTION: heavy-duty, all chrome towel dispensers.

USES: washroom installations.

SPECS/FEATURES: *Valay Buddy* dis-



20 Years From Today...

The Same Shadow-Free Light

Architect:  
Minoru Yamasaki & Associates

## from HONEYLITE\* Luminous Ceilings

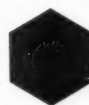
Short-term obsolescence and costly replacement are eliminated with a HONEYLITE Luminous Ceiling because only HONEYLITE provides the trouble-free durability and permanence of light, strong aluminum honeycomb. With HONEYLITE overhead, the Reynolds Metals Company's new Great Lakes Region Headquarters is assured of shadow-free, glare-free lighting for many years to come.

HONEYLITE's aluminum, open-cell construction is responsible for its unique lighting performance and installation advantages. Completely fire-proof, HONEYLITE is listed by Underwriters' Laboratories, Inc. with a Flame Spread rating of Zero, a Smoke-Developed rating of Negligible. HONEYLITE is further listed by UL for

installation under fire-sprinkling systems, permitting sprinkler, heating, air-conditioning and ventilating units to be concealed and integrated without loss of performance. Inherently non-static, HONEYLITE is dust resistant . . . requires only occasional cleaning at a maintenance cost less than that required by an equivalent floor area.

A wide range of HONEYLITE cell sizes, cut-off angles and finishes offers complete lighting flexibility for new construction and remodeling. For further information on HONEYLITE, today's most advanced luminous ceiling system, see the HONEYLITE Catalog in Sweet's Architectural File or write Dept.

\*Trademark of Hexcel Products Inc.



**HEXCEL®** PRODUCTS INC.

World's Largest Manufacturer of Honeycomb Products and Materials

Executive Offices: 2332 Fourth Street, Berkeley, Calif.

Sales Offices: Long Island City, N.Y.; Chicago, Ill.; Fort Worth, Texas.; Inglewood, Calif.

Available in Canada through Curtis Lighting, Ltd., Toronto, Ontario

Circle 131 for further information



for doors  
to swing  
true...



## russwin doorware

Russwin Adjustable Pivot Hinges — Built for lifetime wear and trouble-free support on heavy doors in high-frequency service. Simple adjustment raises or lowers doors for sag correction and precise weight distribution. Prelubricated roller and ball bearings. For details on complete line, write Russell & Erwin Division, The American Hardware Corporation, New Britain, Conn.



Circle 132 for further information



introducing...

Push-it  
Rock-it  
Roll-it  
Press-it

## THE ALL-NEW P&S ROCKER-GLO SWITCH

... the switch that looks right, feels right  
and is right for every type of wiring job.

Here is the one switch with the most wanted features on the market today.  
The merest touch causes instant, silent action ...  
and Rocker-Glo glows in the dark.

Available in Despard and narrow rocker types.  
Write for brochure, Dept. AE-96



60 E. 42nd St., New York 17, N.Y. 1440 N. Pulaski Rd., Chicago 51, Ill. In Canada: Renfrew Electric Co., Ltd., Toronto, Ontario

Circle 133 for further information

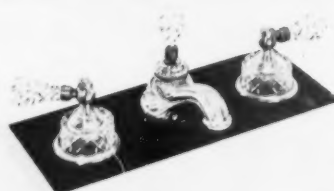
## PRODUCTS, EQUIPMENT, MATERIALS

dispensers measure 7½" deep, 13¾" wide, and project 6" from wall. Mfr states that besides bringing decorative value of chrome to washrooms, dispensers speed washroom traffic and cut down number of units need per installation through controlled side-by-side dispensing of aquavated towels, reported to be 50 per cent more absorbent than ordinary paper towels. Dispensers hold twice as many towels as usual dispenser, cutting service calls in half. No springs, levers, buttons, or cranks. Cabinet locks securely to prevent pilferage. Cabinets available in black or white pebble grain baked enamel finish and triple chrome door. Other colors on special order.

AIA FILE NO. 29-J

MFR: STEVENS & THOMPSON PAPER CO.

Circle 235 for further information



## DECORATIVE BATH FIXTURE LINE

MFR'S DESCRIPTION: line of plumbing fixtures and bathroom accessories with emphasis on gold and silver-plated finishes.

USES: bathroom installations.

SPECS/FEATURES: made to fit all standard basins, line of lavatory ensembles runs through wide range of designs including solid brass. All are complete with basic plumbing parts. Also available are matching or blending bath accessories as well as decorative hardware for doors, drawers, and cabinets.

AIA FILE NO. 29-F.

MFR: PHYLRICH CORP.

Circle 236 for further information

## ELECTRIC VALVE AND TIMING MECHANISM

MFR'S DESCRIPTION: electric-motor-driven valve and timing mechanism for fully-automatic water softeners and filters.

USES: residential and commercial applications.

SPECS/FEATURES: all parts which might need service are readily accessible from outside. It provides downflow in service, upflow backwashing (with water), downflow



## planning a school or library?

get help  
from these 2  
**STACOR**  
equipment  
catalogs

They show space-saving, economical, attractive units ... ways in which to use them ... features that have made the Stacor name famous for well designed, well made, well accepted equipment.

WRITE, WIRE, PHONE FOR  
YOUR COPIES TODAY.

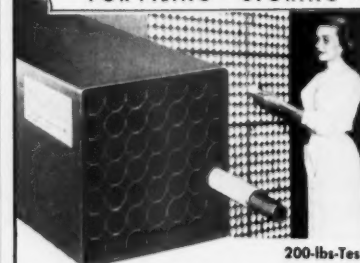
## STACOR EQUIPMENT CO

Manufacturers of Lifetime Quality Drafting Equipment for Schools, Libraries & Industry  
331 Emmet Street, Newark 5, N.J. • Bigelow 2-6600

Circle 134 for further information

## MULTIROLL FILES

FOR FILING • STORING • SEGREGATING



TRACINGS  
BLUE PRINTS  
SHEET  
MATERIAL

FILE CONSTRUCTED IN  
200-lbs-Test CORRUGATED CONTAINER

Depth	11¼"	22¼"	30½"	36½"	42¼"
49 Tube Model 1¾" I.D.	49AB \$7.50	49CD \$9.50	4930 \$12.80	4936 \$13.80	4942 \$14.80
25 Tube Model 2¼" I.D.	25AB \$7.00	25CD \$9.00	2530 \$11.80	2536 \$12.80	2542 \$13.80
	Shipping Weight				
Model 49	8 lbs.	12 lbs.	15 lbs.	18 lbs.	20 lbs.
Model 25	6 lbs.	10 lbs.	13 lbs.	15 lbs.	17 lbs.

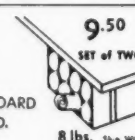


Sold in Sets Only—  
2 JR36 Per Set

ENAMELED MED. GRAY

## JR 36

DESIGNED TO MOUNT UNDER BOARD  
MOUNTING BRACKETS FURNISHED.



F.O.B. St. Clair Shores, Mich. • PRescott 3-2515 • SOLD DIRECT ONLY

Write to Dept. B-2

ROLL & FILE SYSTEMS, INC. • P.O. BOX 3863, DETROIT 5, MICH.

Circle 135 for further information

Architectural & Engineering News

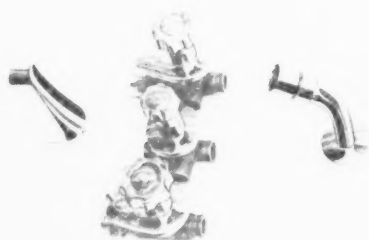
## PRODUCTS, EQUIPMENT, MATERIALS

brining, and downflow rinsing. *Traf-fic-Light* sequence timer is same type as in general use. Backwash, salt, and rinse clips are variable, to fit any given timing cycle up to 90 minutes maximum. Unconditionally guaranteed for 10 years.

AIA FILE NO. 29-D-3

MFR: REYNOLDS WATER CONDITIONING CO.

Circle 237 for further information



### TRUE BY-PASS SHOWER FITTINGS

MFR'S DESCRIPTION: #12 DSHVBP *By-Pass Shower Fittings* overcome problem of complete water shut-off during repairs.

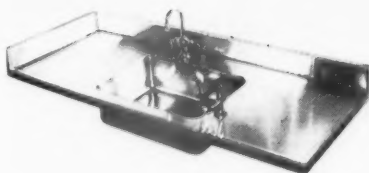
USES: multiple-storied dwellings.

SPECS/FEATURES: fitting allows water to be turned off at fitting so that normal unrestricted flow of water is available to other apartments while repairs are being made. Only twist of screwdriver needed to turn off water. Also available in two valve tub and shower fittings, #12 DSHV, less by-pass, for individual homes. Mfr claims easy installation, simple operation, and years of trouble-free durability.

AIA FILE NO. 29-H-3

MFR: PRICE PFISTER BRASS MFG. CO.

Circle 238 for further information



### STAINLESS STEEL DECK-TOP/RECEPTOR UNIT

MFR'S DESCRIPTION: complete, stainless steel, "one piece" deck-top and receptor unit.

USES: school, commercial, and industrial applications.

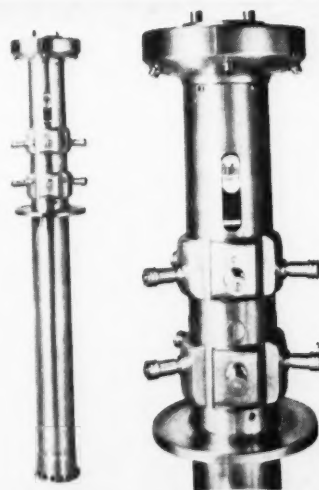
SPECS/FEATURES: designated *Series 2900*, units are formed in 16-gauge,

18-8 type 304 stainless steel, with pre-formed edges, raised and rolled, and four inch backsplash. Units are five feet long, 25" front to back, and install easily on prepared wood framing. Right or left endsplashes are available. All joints are invisible, with no lap joints or solder seams, and decks slope toward receptor so that water drains freely. All under-surfaces are coated with heat-resistant underseal, for sound insulation and condensation proofing. Wide variety of drinking faucets and pantry faucets equip this unit. All fixtures are "vandal proofed" to positively prevent malicious turning. Stainless steel used on units is impervious to most acids and corrosive elements. Units are furnished with chrome plated sink strainers and tailpiece.

AIA FILE NO. 29-H

MFR: HAWS DRINKING FAUCET CO.

Circle 239 for further information



### AUTOMATIC VALVES SHUT-OFF SHOWERS

MFR'S DESCRIPTION: metering device that shuts-off water after 40 seconds.

USES: swimming pool service, schools, industrial plants, institutions, camps.

SPECS/FEATURES: supply of water, either cold or tempered, is delivered for about 40 seconds by pulling button. Each shower head on multi-person units is individually controlled. Use conserves water and also speeds up bathing by groups of users. Showers cannot be left running. Multi-person facilities can be furnished with or without partitions, with pressure balancing valves, self-closing valves, single tempered water valves, or, for remote control, without valves. Self-contained or remote liquid soap dispensers can also be provided. Multi-person showers are

## HOW TO WATCH WITHOUT BEING SEEN



From the darkened observation room, it's a window...



From the clinical room, it's a mirror!

*Mirropane*® has many uses... in hospitals, banks, schools, stores, homes... anywhere that it's desirable to observe—in person or with a camera—without being seen. *Mirropane* made with *Parallel-O-Grey*® Glass provides "see-thru" vision with light differentials as low as 3 to 1 between rooms. For information, call your L-O-F Distributor or Dealer (listed under "Glass" in the Yellow Pages) or refer to Sweet's Architectural File 26-A.

**MIRROPANE**  
the "see-thru" mirror



**LIBBEY • OWENS • FORD GLASS CO.**  
811 Madison Avenue, Toledo 1, Ohio

Circle 136 for further information



## PRODUCTS, EQUIPMENT, MATERIALS

available for two, three, four, or five persons.

AIA FILE NO. 29-H-3

Circle 240 for further information

### MISCELLANY



#### ELECTRIC CONCRETE STEP HEATER MATS

MFR'S DESCRIPTION: electric concrete step heater mats, designed to clear snow and ice from concrete steps.

USES: exterior stairs.

SPECS/FEATURES: when snowfall or freezing begins, heaters prevent accumulation and keep concrete steps clear and safe. No shoveling, salt or cinders necessary. Heaters are *Thermwire* heating cable interwoven with light weight galvanized mesh. Offered in two and three step units, heating a section 8" wide by 36" long on each step. Any combination may be used to match number of steps requiring protection. Rated at 42 watts per square foot. Each unit contains 10' lead wire and 10' ground wire. All cable sections are sheathed in polyvinyl with nylon coating. Units are positioned on top of freshly poured first layer of concrete, then covered with one inch to one and one-half inch top layer. Heaters are connected to inside wall switch.

AIA FILE NO. 30-A-2

MFR: EDWIN L. WIEGAND CO.

Circle 241 for further information

#### ADDITION TO ASPHALT TILES

MFR'S DESCRIPTION: rich, mahogany brown with varied accent colors introduced in marbled asphalt tile line.

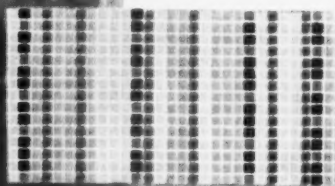
USES: interior applications.

SPECS/FEATURES: tile #B-2001 combines dark brown with marbleization in pink, aqua, bright yellow, and charcoal brown. Marketed in standard 9" x 9" squares, in 1/8" and 3/16" gauges, the approximate retail

Circle 137 for further information  
about CAMBRIDGE TILE

Have you discovered  
the wonderful decorative possibilities of

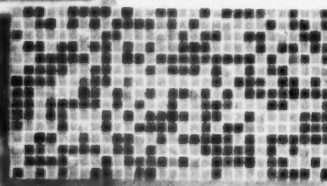
# HORIZON



Design No. M 13



Design No. M 15



Design No. M 11

Design No. M-5  
Actual size tiles



**FREE COLOR PALETTE** of actual tiles showing complete range of 58 different available colors will be sent without cost to architects and designers who write on their professional letterhead to Dept. AE-606.

# TILE

...the new  
glazed ceramic mosaic  
produced in the U.S.A.  
by **Suntile**

Here's a sure-fire way of giving your interior wall designs an interesting fresh appearance . . .

*Design them with HORIZON TILE.* This new, colorful wall tile has an informal, handcrafted appearance that's beautiful beyond description.

HORIZON TILE achieves its distinctive appearance through the intentional variation and irregularity of its shape, its surface texture and its 58 beautiful color shades that range from soft pastels to solid or textured tones.

Whether you use HORIZON TILE to create a beautiful mosaic mural, like the one shown here, or use one of the many interesting "Buckshot" or "Striped Pattern" designs created by Suntile's Design Department, you'll find that HORIZON TILE adds greatly to the beauty of your finished wall.

HORIZON TILE, made in America by Cambridge, is available through your local Suntile dealer. His name is listed in the Yellow Pages of your telephone directory.

## OUR DESIGN DEPT.

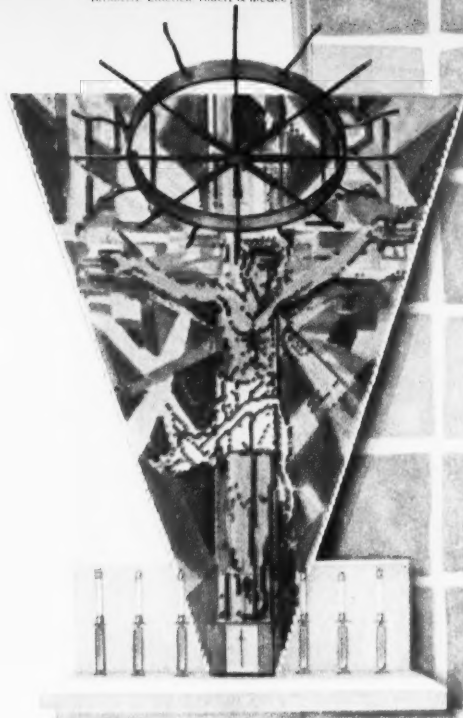
under the direction of George Limke is ready to assist you with your tile design or layout problems. Send us your plans or elevations for suggested tile applications, or let us put your own tile designs in layout form.



## THE CAMBRIDGE TILE MFG. CO.

P.O. Box 71, Cincinnati 15, Ohio

Architects: Emerick, Albert & McGee



The Crucifixion —  
an 11' x 15' mosaic mural  
St. Andrew's Church  
Columbus, Ohio  
Muralist: Charles L. Madden  
Resurgere Associates,  
Phila., Pa.

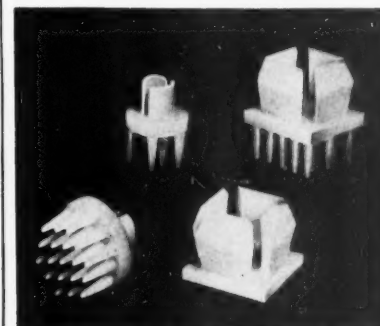
Design No. M-2  
Actual size tiles

## PRODUCTS, EQUIPMENT, MATERIALS

prices are, respectively, 14¢ per square foot and 21¢ per square foot. AIA FILE NO. 23-G

MFR: MASTIC TILE DIV., THE RUBEROID CO.

Circle 242 for further information



## CARPET AND FLOOR GUARDS

MFR'S DESCRIPTION: "made to specifications" line of *Custom* guards.

USES: carpet and floor protection.

SPECS/FEATURES: featuring one-piece construction for easy application to all types of legs, round or square, wood or metal, *Custom* line incorporates many advantages of standard line: sturdy plastic strength, impervious to rust or cleaning compounds, non-marring, non-staining. Guards have weight-distributing "comb" support that prevents crushing or matting of soft-surface floor coverings. Designed for easy, permanent installation, square guard snaps into square metal leg by removal of steel glides; round guards wedge into hole bored into wooden leg. All styles available in ivory, brown, buff, or custom matched colors in any size.

AIA FILE NO. 19-J

MFR: UNITED STATES CASTER CUP CORP.

Circle 243 for further information

## POWER PANEL FOR EDUCATIONAL ELECTRICITY

MFR'S DESCRIPTION: comprehensive *Lab-Volt* self-contained electrical power source for educational electrical work.

USES: educational institutions.

SPECS/FEATURES: *Lab-Volt Power-master Panel*, model 204, available in panel form for standard rack mounting, or cabinet for table or desk top use. Unit offers following electrical services: continuously variable AC and DC high and low voltage, DC transmitter and bias supply, AC filament and rectifier sources, con-

Circle 137 for further information  
about CAMBRIDGE TILE

almost  
like  
trying to  
improve  
the  
egg

... a NEW "mortar-lock" channel makes *PYROBAR\** partitions even stronger  
Gypsum Partition Tile



PYROBAR continues to offer the advantages that have made it a favorite for 50 years. PYROBAR is still 30% to 50% lighter than other masonry tiles. It still offers the gypsum-to-gypsum bond that saves 20% on plaster and makes possible fire ratings of one to five hours. And PYROBAR tiles are still a large 2½ sq. ft. in surface area to save on mortar and labor.

We've actually found a way to improve PYROBAR. For 50 years this lighter, larger partition tile has been preferred for the savings it offers in weight, labor, mortar, and plaster. But now, with a channel top and bottom, we've made it even better. The channel creates a mortar-lock that acts as a spline the whole length of the partition, for every course that's laid. This mortar-lock and the 8% to 15% more gypsum-to-gypsum bonding area offered by the channeling make a PYROBAR partition exceptionally strong in horizontal or shear strength. Ask your U.S.G. representative for specifics, or write United States Gypsum, Dept. AEN-05 300 West Adams St., Chicago 6, Illinois.

\*T.M. Reg. U.S. Pat. Off.

**UNITED STATES GYPSUM**  
the greatest name in building



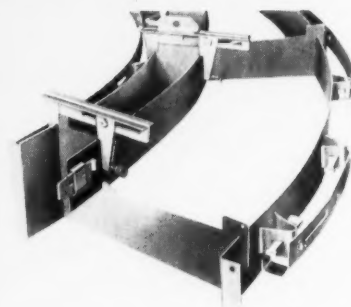
## PRODUCTS, EQUIPMENT, MATERIALS

tinuity testing source, duplex line voltage outlet, and complete AC and DC metering service. All circuits are protected by fuses accessible from panel front, and all receptacles are clearly and permanently identified with voltage and continuous duty amperage ratings. Construction is of 12 gauge steel finished in gray-green baked enamel. All variable services have individual on-off switches and master switch provides over-all on-off control. Each model 204 supplies complete work-station service for two advanced students or complete demonstration facilities for secondary level or industrial arts courses, and comes complete with all necessary mounting hardware and test leads. Input required for unit is standard 115 volt AC service available in every school.

AIA FILE NO. 35-B

MFR: BUCK ENGINEERING CO.

Circle 244 for further information



### STEEL FORM FOR CURBS & GUTTERS

MFR'S DESCRIPTION: *Quick-Strip*, flexible steel form that simplifies pouring for curb-and-gutter combinations in curves.

USES: concrete construction.

SPECS/FEATURES: in two easy steps, form can be set up and locked in place for smooth, uniformly curved facings. After concrete is set, form strips right off; reducing surface finishing as well as minimizing stripping. Mfr claims better job in less time with much lower labor costs. *Quick-Strip* is reported easy to use: set up curb back form and gutter form in desired curve, and slip special division plates on. Then mount the curb face form—held at bottom by positioning stop and locked at top by clamp. Steps are repeated at each division plate until setting is complete. To strip: merely unscrew clamps and lift off curb face. Avail-

← Circle 138 for further information  
about U.S. GYPSUM



able in convenient 10' lengths, with heights of six, seven, eight, and nine inches.

AIA FILE NO. 4-D

MFR: BINGHAMPTON METAL FORMS, INC.

Circle 245 for further information

#### ADJUSTABLE POST ANCHOR

MFR'S DESCRIPTION: *Ancor-Eez*, adjustable post anchor allowing up to 2 3/4" lateral adjustment and 1 1/2" vertical adjustment.

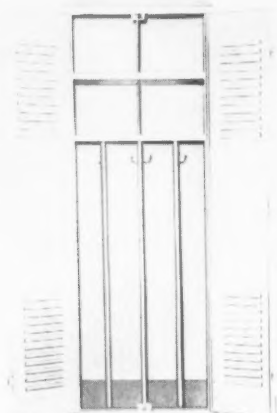
USES: carports, patios, porches, partitions, and general construction.

SPECS/FEATURES: easily installed, unit is reported to provide termite and dry-rot protection with stand-off plate that prevents fungi and termites from attacking post. Available in sizes 4" x 4", 4" x 6", 6" x 6", and 8" x 8". Meets FHA and local building codes.

AIA FILE NO. 14-J

MFR: WOODMACK PRODUCTS, INC.

Circle 246 for further information



#### DOUBLE-DOOR WARDROBE LOCKER

MFR'S DESCRIPTION: steel wardrobe lockers for either four or six persons.

USES: institutional and commercial applications.

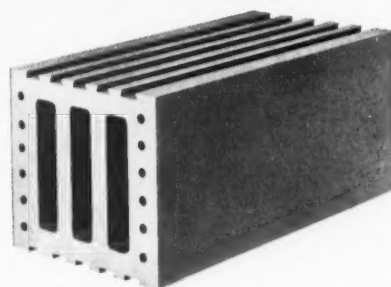
SPECS/FEATURES: lockers have double doors and are equipped with hat shelves and coat hooks. They have internal lift door handles, continuous strike door frame, and full-loop door hinges, and optional *Auto-Lock*. Door handle is fixed and does not move when latch is operated. Need for handle replacement due to rough usage is eliminated. Handle design prevents locker padlock from marring door finish. Door frame is made by intermembering and lapping top and side members of heavy-gauge steel frame. This helps frame maintain true rec-

tangular shape and resist twisting and stress. Full-loop steel hinges are .050" thick. They are said to offer strength advantages over hinges in which each leaf is merely turned back in half a circle. Optional *Auto-Lock* eliminates conventional door handle by permitting doors to be opened and closed with heavy-duty key. Lockers are 66" high (including six inch base), 22" wide, and 15" deep. They are supplied with closed base. Optional sloping top aids house-keeping by preventing accumulation of dust and litter. Ventilation is assured through 12 louvers on upper and lower part of each door. Standard colors are gray, green, and tan. Decorators colors are also available.

AIA FILE NO. 35-H-42

MFR: PENCO DIV., ALAN WOOD STEEL CO.

Circle 247 for further information



#### TWO-HOUR FIRE RESISTANT TILE

MFR'S DESCRIPTION: tile for use where single unit nominal six inch wall with two-hour fire resistance rating (unplastered) is required.

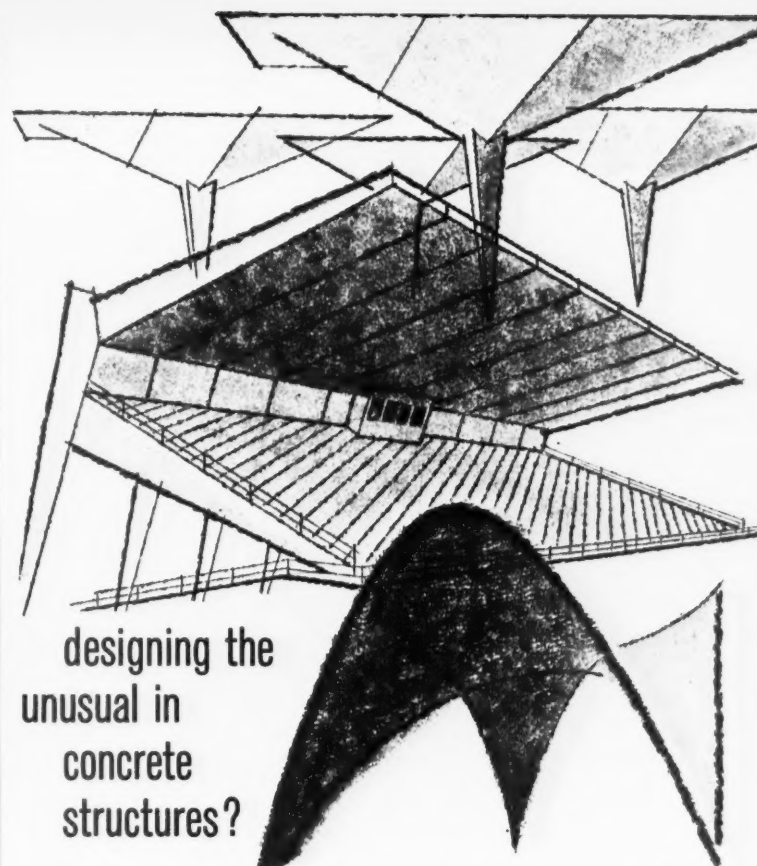
USES: stair wells, elevator shafts, fire walls, and partitions.

SPECS/FEATURES: tested in accordance with ASTM Specification E119-58, full-size 10 x 10 panels withstood maximum temperature of 1875° F on fire-exposed surface for two hours and 23 minutes. This was followed immediately by severe thermal shock of fire hose stream test at nozzle pressure of 30 pounds per square inch for two and one-half minutes without leakage or severe damage. *Fireproofers* units are available in 6T series (5 1/8 x 11 3/4-inch face size) with scored shells and three cells in wall thickness. Variety of ceramic glaze finishes available on select surface only, with smooth unselected, unglazed back. Backs with scored surfaces for plaster application available on special order. Also available in buff, unglazed material, in full and light color ranges; select one face, with opposite face either unscored or scored for plaster finish.

AIA FILE NO. 10-B

MFR: NATCO CORP.

Circle 248 for further information



designing the  
unusual in  
concrete  
structures?

remember to protect them against the ravages of time

Even the most delightful flight of fancy in prestressed concrete can eventually become unsightly through erosion and corrosion. Sometimes sooner than we like to think. One simple, low-cost assurance of long life is to specify vulnerable surfaces be coated with Thoroseal. This fine cementitious material will protect against moisture penetration and usual corrosion and it becomes a decorative surface in any of several colors, gray or white. Add to your files our specification guide describing Thoroseal and all other Thoro System products for masonry protection. Use the coupon below.



Please send me your free new specification guide.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

# Standard Dry Wall

Box X-15 New Eagle, Pa. Products, Inc.

Plants at New Eagle, Pennsylvania and Centerville, Indiana

Circle 139 for further information

# DRAFTING TRENDS



Drafting Templates are a valuable tool to faster drafting. They are available in an almost endless variety.

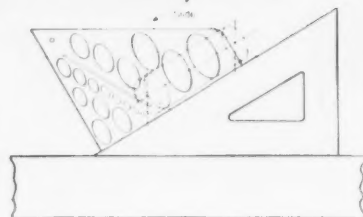
## Specialized drafting templates speed drawing time

Always a handy tool, drafting templates are becoming increasingly in use to simplify everyday drawing techniques. Now vinyl plastics are used in the manufacture of the majority of templates. But the thickness, color and finish vary in almost endless profusion. Glare-saving colors, such as green and amber, are usual, both in clear and matte finishes. However, the white and clear plastics still are popular. The thicknesses vary with the different types of available templates from .020 gauge through .070 gauge.

### Specialized template applications

A list showing the growing application for templates includes templates for: Electronic Symbols, Electrical Wiring, Landscaping, Screw Heads, House Plans, Nuts and Bolts, Screw Threads, Tooling, Windows, Plumbing, Mathematical Symbols, Map Planning, and many "all-purpose" templates for circles, ellipses, triangles, and other shapes.

## Isometric ellipse template is a big timesaver



An isometric ellipse template may be more useful if it is cut in half to provide edges parallel to the minor axes of the ellipses. Halves of the template may then be moved along a 30-60 degree triangle so that ends of a shaft or any cylindrical shape can be drawn in a minimum of time and in perfect alignment.

A selection of 52 popular templates is illustrated and described in a special six page brochure, "Drafting Templates" recently published by Frederick Post Company. For your copy, write Frederick Post Company, 3654 N. Avondale Ave., Chicago, Illinois.



SENSITIZED PAPERS & CLOTHS • TRACING & DRAWING MEDIUMS • DRAWING INSTRUMENTS & SLIDE RULES  
ENGINEERING EQUIPMENT & DRAFTING SUPPLIES • FIELD EQUIPMENT & DRAFTING FURNITURE

Circle 140 for further information

# LITERATURE

Literature cited in this department is available from various manufacturers and associations free of charge, except where indicated. To obtain copies, circle the keyed numbers on the reader service cards facing pages 1 and 70.

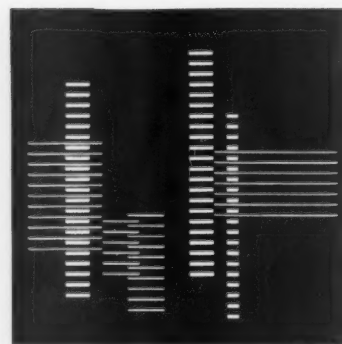
## CONTEMPORARY INTERIORS

A gallery of contemporary interior designs, with commentary written by an architect who lived 2,000 years ago is being offered in a full color portfolio, entitled *A Portfolio of Mid-Twentieth Century Architectural Interiors*. Featured in booklet are seven American buildings to which resilient flooring has made outstanding contributions. Each illustrates a different concept in architectural design. Copy is interlaced with comments by the Roman architect Vitruvius whose ideas expressed circa 40 B.C. still have validity in the Twentieth Century. Most of the photographs in the portfolio were taken by Lawrence S. Williams architectural photographer from Philadelphia. Buildings featured in the booklet include the Bennington College Library designed by Pietro Belluschi and Carl Koch & Associates; Parke-Davis building, San Francisco, designed by Minoru Yamasaki & Associates in association with Knorr & Elliott; Connecticut General Life Insurance Co. building, Hartford, Conn., designed by Skidmore, Owings and Merrill; Automobile Club of Washington (AAA) building, Seattle, designed by John Graham and Co.; Church of the Redeemer, Baltimore, designed by Pietro Belluschi and Rodgers, Taliaferro and Lamb; International Minerals and Chemical Corp. building, Skokie, Ill., designed by Perkins and Will; and the Dallas Trade Mart, designed by Harold A. Berry and Donald H. Speck in consultation with Harwell Hamilton Harris. (16 pp.) AIA FILE NO. 28-E

MFR: ARMSTRONG CORK CO.  
Circle 300 for further information

## WELDED WIRE REINFORCEMENT

Publication of current *WRI Building Design Handbook* announced. Book is intended for use by designers, engineers, architects, consultants, and others concerned with reinforced concrete construction. Handbook is divided into two parts. First part consists essentially of general text



A PORTFOLIO OF MID-TWENTIETH CENTURY ARCHITECTURAL INTERIORS, WITH COMMENTS BY VITRUVIUS. A 16 page collection of views of important new buildings. Captions from Vitruvius. The text speaks in Latin but, while there are always new architectural frontiers and forms, certain principles and facts are constant to good architecture in any period.

300



WELDED WIRE REINFORCEMENT

## LITERATURE

and pictures describing ways in which steel wire fabric is put to effective use. Tables, sketches, and detail drawings are included to help design engineer and his draftsmen. Also in part one are several case histories of projects in which wire fabric has been used to particular or unusual advantage. Second part deals primarily with the rapidly widening use of heavy welded wire fabric, and being principally a series of actual design tables (with necessary explanatory text), is expected to be a working tool in the actual design of structures. To make use of tables more effective, several illustrative design problems are included. In part two of handbook are tables for one way slab design, with spans from 10½ feet to 21 feet in conventional concrete, and spans 10½ feet to 24 feet in lightweight concrete. Two way flat slab tables, which afford the designer full use of heavy fabric's two way design capability, cover slabs of conventional concrete, and of lightweight concrete, both with and without drop panels, up to 26 feet square. Also in handbook are tables for designers of tilt-up concrete wall panels for two and four point pick-up design, in both conventional and lightweight concrete. Other tables cover design of vertically spanned basement walls, cantilevered retaining walls, and square individual column footings. As an aid to the quality take-off man, complete instructions are given on detailing and ordering welded wire fabric, including a sample framing plan and schedules. Handbook will be made available without charge to all bona fide inquirers, requesting it on organization's letterhead. Address requests to Dept. BH-70, Wire Reinforcement Institute, 1049 National Press Bldg., Washington 4, D.C. (168 pp.)

AIA FILE NO. 4-E-2

ASSN: WIRE REINFORCEMENT INSTITUTE, INC.

Write manufacturer directly

### DOORS & PANELS

#### VINYL COATED STEEL

Architectural doors and wall panels that are stated to combine warmth, texture, color and over-all economy coupled with strength and permanence of steel, are now available. Architectural applications are described in two folders; *A New Look In Interiors* (4 pp.), and *Curtain Wall And Interior Wall Panels* (4 pp.). Contained in the folders are discussions of the techniques used in making doors and panels, names and

General Waterproofing—Boilers of this plant are below the level of nearby Delaware River



General Waterproofing—Pennsylvania State Office Bldg., Phila.

ARCH: CARROLL GRISDALE & VAN ALLEN • HARRISON ROUGH LIVINGSTON & LARSON • HOLEN & SWINBURNE



Hydrostatic Head Waterproofing—Lincoln Tunnel, New Jersey approach. Courtesy Port of New York Authority



Entire Roof of Masonic Temple, Dallas, Texas, is coated with Karnak Aluminum Roof Coating



IN IMPORTANT CONSTRUCTION,  
*the* CHOICE FOR  
WATERPROOFING • DAMPPROOFING  
MASTIC FLOORING • ROOFING  
REFRIGERATION

# KARNAK

LEWIS ASPHALT ENGINEERING CORP.

**ASPHALT PRODUCTS**  
AND CONSULTING SERVICE

Since 1922, an organization dedicated to the protection of engineered construction from damage due to water and the elements. Our engineering staff of experienced specialists in this highly technical field is at your service.

**LEWIS ASPHALT ENGINEERING CORP.**  
30 CHURCH ST., NEW YORK 7, N. Y.



ASPHALT EMULSIONS • WOOD BLOCK MASTIC • ASPHALT PAINT • MASTIC FLOORING • DAMPPROOFING  
ROOF COATINGS AND CEMENTS • PLASTER BOND • CORK FINISH • ASPHALT ALUMINUM COATINGS  
PROTECTIVE COATINGS • WATERPROOFING ASPHALT • WATERPROOFING FABRIC • TILE CEMENT

Circle 141 for further information





1,000 car, 2-level hotel parking area. Architect: Welton Becket & Associates.

## glamour hotel guests park on

**Jennite J-16**

### surface seal

At the fabulous, new Beverly Hilton, as at leading airfields, parking lots, playgrounds and parkways, asphalt pavements are protected by Jennite J-16 liquid surface seal.

Jennite stops destructive effects of gasoline and oil, seals out frost . . . stops crumbling and retards drying action of the sun. The attractive, satin black Jennite surface is tough, easy-to-clean . . . a sound investment in improved appearance and increased service life.

### New bulletin describes 6 basic uses

In addition to maintaining asphalt surfaces, Jennite J-16 is ideal for sealing concrete floors and pavements, damp-proofing cement or masonry construction, coating reinforcing fabric, preserving metal roofs and protecting all types of exposed metal.

Specifications covering these uses are listed in catalog LL-4874 or in Sweet's Architectural File, 5/Ma.

AA-7250

### Distributors and Stocks in principal cities

Maintenance Inc.  
Wooster, Ohio  
Send us catalog LL-4874

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Circle 142 for further information

## LITERATURE

addresses of the many leading companies fabricating them, and the Underwriter's Laboratories' classification now granted this material.

AIA FILE NO. 19-E-13  
MFR: UNITED STATES STEEL CORP.  
Circle 301 for further information

### SECURITY PANELS

Color booklet describes in detail advantages of *Resolite* security panels. The material itself features combination of steel mesh and polyester resin translucent panels. Interwoven, they are stated to create unusual decorative material somewhat like old fashioned leaded glass. Installation and technical information are covered. (4 pp.)

AIA FILE NO. 26-A-9  
MFR: RESOLITE CORP.  
Circle 302 for further information

### ENAMEL PANELS

Current booklet offering product information and case histories involving use of architectural porcelain enamel panels announced. Issue no. three of *The Erie Enameler* includes information on two-hour fire-rated panel and silk-screened patterns on porcelain enamel. Also included are sections on the use of adhesives, facts on chemical welding, and series of photographs of schools, shopping centers, and office buildings throughout the country which have been constructed with mfr's curtain wall panels. (12 pp.)

AIA FILE NO. 17-A  
MFR: THE ERIE ENAMELING CO.  
Circle 303 for further information



**FOLDING DOORS**  
Accordion folding door catalog available which graphically describes the

*Standard Imperial 8; Custom Imperial 8; and Monarch Custom 12* doors, designed for commercial and institutional applications. Complete specifications, construction features, track drawings and dimensions are contained, plus full color fabric reproductions. Catalog also includes the *Acoustifold* and *Dual Acoustifold* doors, with test frequency ratings.

AIA FILE NO. 16-M  
MFR: STRAITS DIV., CLOPAY CORP.  
Circle 304 for further information

### AUTOMATIC DOOR EQUIPMENT

*Magic-Door*, automatic door operating equipment for use with materials handling systems, described in current folder. Included are sections on features of pneumatic operators, general and operators' specifications, catalog of seven *Magic-Door* materials handling operators available, and discussion of benefits resulting from use of product. (6 pp.)

AIA FILE NO. 27-C  
MFR: STANLEY HARDWARE, DIV., THE STANLEY WORKS  
Circle 305 for further information

### LIGHTING

#### BASEBALL FIELD LIGHTING

Bulletin OLP-1014 gives typical base-

ball park floodlighting recommendations, with diagram showing layout of field and spacing for lighting units. Chart includes lighting requirements for all major leagues as well as semi-pro and municipal leagues. Shows type pole, mounting heights, type and number of floodlights, with load requirements for specified footcandle illumination, both infield and outfield. (1 p.)

AIA FILE NO. 31-F-30  
MFR: GENERAL ELECTRIC CO.  
Circle 306 for further information

### PLASTICS DIFFUSERS

High impact, rigid vinyl material, *VCA-3606*, for luminous ceiling diffusers and other lighting fixture applications has been introduced. Film and Sheet Technical Release No. 8 gives specifications, instructions for installation and maintenance, and other information. (4 pp.)

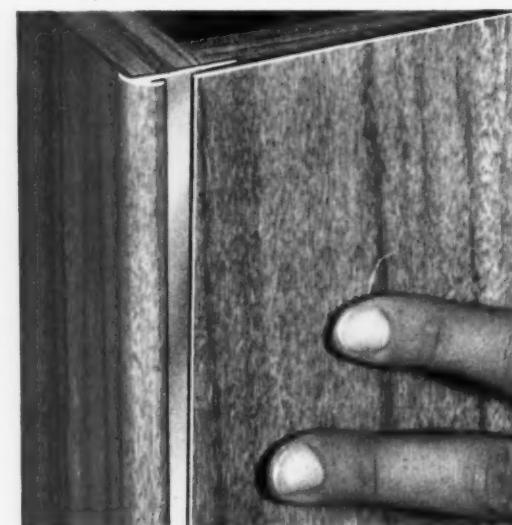
AIA FILE NO. 31-F-2  
MFR: UNION CARBIDE PLASTICS CO., DIV. UNION CARBIDE CORP.  
Circle 307 for further information

### OPTICAL LIGHTING SYSTEM

Bulletin, L-122-M-1, gives complete information on *Tempered Square Convex Lens* for general area lighting. Illustrated bulletin lists features of the heat and impact resistant glass

**Look!**  
moldings  
that  
match

*in colors  
and patterns  
of all plastic  
surfacing  
materials*



Kalwood Matching Moldings are made of aluminum — with a thin, durable, matching veneer of wear-resistant plastic, permanently bonded to exposed surfaces. ALL patterns can be matched in Formica, Pionite, Panelyte, Consoweld for any surfacing material.

Since Kalwood moldings allow for settling and contraction, you never have to worry about buckling, curling, or joint separation. Available in shapes to meet every trim requirement. Write for descriptive literature. Keller Products Inc., 43 Union St., Manchester, N. H.

**keller products inc.**

Dept. A-90 43 Union St., Manchester, New Hampshire

Circle 143 for further information

Architectural & Engineering News

lens along with suggested specifications. Drawing of the product's optical system is included. Prismatically designed to control brightness and deliver a uniform lighting level, the lens serves as a companion piece to the mfr's *Corridor Lens* and can be used with the same incandescent fixture optically designed reflector. Lens is offered for open area lighting in such places as schools, public buildings and security institutions, and for entry and canopy illumination. (2 pp.)

AIA FILE NO. 31-F-237

MFR: CORNING GLASS WORKS

Circle 308 for further information



#### COMBINATION DIFFUSER

Catalog on line of multi-purpose *Lumi-Flo* troffers offered. Units are stated to provide light, cool air, and warm air from the same concealed ceiling fixtures. Fixtures are particularly adapted to installations in offices, schools, hospitals, hotels, restaurants, laboratories, and stores. Modern-appearing units provide freedom of lighting design as well as wide choice of enclosures to meet desired lighting specifications. Catalog includes detailed illustrations and specification covering all elements of troffers and describes how air is distributed in low velocity, even flow, draft free manner. (44 pp.)

AIA FILE NO. 31-F-2

MFR: BENJAMIN DIV., THOMAS INDUSTRIES INC.

Circle 309 for further information

#### LAB & KITCHEN EQUIPMENT

##### ASBESTOS/CEMENT SHEETING

*Colorlith*, used in both industry and schools for laboratory table tops, sinks, hoods, shelves, and other hard-working surfaces, is described in brochure *IN-296A*. The available thicknesses with recommendations as to optimum thickness for certain applications are described in booklet

World Headquarters offices of Pepsi-Cola Company, 500 Park Avenue, New York City, are illuminated with ceiling panels of new impact resistant rigid vinyl sheet panels of modular design. Illumination level is 50 foot-candles at desk height. The *BAKELITE* vinyl panels were fabricated by Piolite Plastics Corp. Lighting was by Globe Lighting Products, Inc., and installation by Fischbach and Moore, Incorporated.



Refreshing light for the "light refreshment"...

## LUMINOUS CEILINGS OF HIGH-IMPACT VINYL PANELS LIGHT NEW PEPSI-COLA WORLD HEADQUARTERS BUILDING

IN MANY towering offices along New York's famous Park Avenue, translucent ceilings made of *BAKELITE* rigid vinyl sheet improve lighting efficiency and enhance decor. Here, in the World Headquarters of Pepsi-Cola, panels of new *high-impact BAKELITE* rigid vinyl sheet form a glowing, handsome ceiling. No shadows at eye level... no problem of balancing daylight and interior lighting. This is custom-made illumination—so natural, you are hardly aware of its existence!

*BAKELITE* rigid vinyl sheet forms panels with extra resistance to hard knocks and rough handling during installation and maintenance... they are resistant to warping and cracking... they go years without discoloration

by ultraviolet. Costs can be cut because much thinner sheets can be used than for other types of diffusers. They're self-extinguishing, and in addition the installation can be designed so they'll soften and fall out before the sprinkler operating temperature.

With new *BAKELITE* high-impact vinyl sheet you get greater freedom of design... new beauty for older fixtures... much longer service life.

Write today for more information! Dept. DQ-8, Union Carbide Plastics Company, Division of Union Carbide Corporation, 270 Park Ave., New York 17, N.Y.

**UNION  
CARBIDE**

BAKELITE and UNION CARBIDE are registered trade marks of Union Carbide Corporation.

Circle 144 for further information



yours **FREE...the NEW**  
**1960 RLM specifications book for**  
**industrial**  
**lighting**  
**equipment** brings you  
**New and Upward Revised Standards**

## BUT...

### REMEMBER THIS IMPORTANT FACT!

This new edition announcement again emphasizes the fact that RLM Specifications are not fixed standards! They are Quality Standards that grow with the Industry and the Science of Illumination. For your new, complimentary copy of the 1960 RLM Specifications Book, write RLM STANDARDS INSTITUTE, 326 W. Madison St., Dept. 8375 Chicago 6, Illinois.



**THE FINAL INGREDIENT  
 OF BEING SURE**

Circle 145 for further information

## Unitfold® Folding Walls

by

**Fairhurst**  
 T.M. Reg. at the  
**HOTEL STATLER**  
 Boston, Mass.  
 Wm. B. Tabler, Arch.



Proved by successful service in the Boston Statler, the Unitfold Wall has been specified for many other links in this famous hotel chain. Simple manual operation forms units into a rigid wall without hinges, bolts, or

visible hardware. Exclusive Fairhurst construction provides greater sound resistance than any other type. As illustrated in top photo, units fold compactly to give clear access between rooms.

Write for full details

**John T. Fairhurst Co., Inc.**

45 West 45th Street

New York 36, N. Y.

Circle 146 for further information

## LITERATURE

along with recommended procedures for fabricating, bonding, and cementing. Suggestions for proper maintenance and tabular data are included giving physical properties such as density, tensile strength, screw-holding strength, and both Brinell and Rockwell hardness. Table of chemical resistance properties covers exposure to standard laboratory concentrations of common reagents such as concentrated and dilute hydrochloric, sulphuric, and nitric acids, ether, Toluene, and carbon tetrachloride. (12 pp.)

AIA FILE NO. 8-C

MFR: JOHNS-MANVILLE CORP.

Circle 310 for further information

### LABORATORY EQUIPMENT

Current *Metal Scientific Laboratory Equipment Catalog* now available. Comprehensive catalog covers complete line of industrial metal laboratory furniture, laboratory fume hoods, and plumbing and electrical fixtures. In addition to basic units and furniture assemblies shown, several pages are devoted to how laboratory assemblies are built up, laboratory work tops, and metal furniture construction details. (142 pp.)

AIA FILE NO. 35-E

MFR: KEWAUNEE TECHNICAL FURNITURE CO.

Circle 311 for further information

### GAS RANGES

Folders offered giving complete descriptions and specifications for 20-, 30-, and 36-inch *Deluxe* gas ranges. 30- and 36-inch models are described in folders showing photos, specifications and information about features. *Keep-Warm* oven system, *Thermo-Set* top burner, and *Roto-Roaster* rotisserie are described in detail. Booklets also outline *Beatrice West* color-planning service available free to homemakers purchasing appliances. 20-inch model is described in one-page specification sheet including photos, list of features, and specifications. (10 pp.)

AIA FILE NO. 35-C-11

MFR: CALORIC APPLIANCE CORP.

Circle 312 for further information

### FOUNTAIN CATALOG

Illustrated catalog covering line of soda fountains has been released. *Metropolitan* self-contained soda units come in three foot and four foot lengths, equipped with two *Super-Soda* draft arms or with patented *Flomatic* draft system. Latter provides for dispensing beverages in addition to plain and carbonated water. Soda fountains are combination of high grade soda units

with matching stainless steel ice cream cabinets of 10, 20, or 30 gallon capacity. Catalog also describes *Superior* line of soda units, which comprise triple sink sections, which come in 5'6 1/2" and 6'6 1/2" lengths. These soda units are also available with two draft arms or with dispensing system. Specific parts are described and optional equipment is listed. (12 pp.)

AIA FILE NO. 35-C-4

MFR: THE BASTIAN-BLESSING CO.

Circle 313 for further information

### GYM & LOCKER EQUIPMENT

#### STEEL LOCKERS

Current catalog illustrates and describes nine locker styles for use in offices, schools, industry, stores, institutions, and clubs. Units covered are: single tier lockers; double tier lockers; multiple tier lockers; air-lite lockers; two-person lockers; special lockers; and basket racks. In addition to illustrations and descriptions, complete dimensional information is given for each style. Also presented in catalog are locker design and construction features. These include full-loop door hinge, tier head construction, intermembered door frame, fixed door handle and *Auto-Lock*, which eliminates locker door handles by using heavy-duty key to operate latching mechanism. Planning aids section provides basic locker information that is stated to help user in planning efficient, economical locker layout. Complete specifications and tips on ordering simplify purchasing. Other storage equipment detailed in *Catalog 6000* includes: clip type and standard bolt-type shelving; steel counters; wardrobe and storage cabinets; and book case shelving. (24 pp.)

AIA FILE NO. 35-F-1

MFR: PENCO DIV., ALAN WOOD STEEL CO.

Circle 314 for further information

### GYMNASIUM EQUIPMENT

Current catalog in color describing line of outdoor and gym seating equipment, folding partitions, basketball backstops, and new folding stage. Catalog covers 10 different models of manual and automatic powered gymstands and folding bleachers. Installation and operation plans of automatic and manually operated folding partitions are fully detailed to suggest a wide range of space utilization ideas. Also illustrated are typical wall and ceiling-mounted basketball backdrops in broad quality line of 36 models adaptable to any structural condition. Space-saving features of multi-dimensional folding stage are described. Catalog outlines specific models and design fea-



tures in portable, permanent, and outdoor stadium spectator seating. Seven basic models and accessory equipment are described. (42 pp.)  
AIA FILE NO. 35-F-1  
MFR: WAYNE IRON WORKS  
Circle 315 for further information

## HVAC



### AUTOMATIC WEATHER CONTROLS

Weather sensitive controls that govern inside comfort by outdoor temperatures are described in current folder. *Weather-Man*, *Weather-Flo*, and *Weather-Chron* controls operate with all fuels including electric heat, in steam, hot water, warm air, or radiant panel systems, according to mfr. They are designed for commercial, industrial, and residential comfort control. According to *Bulletin G-0260*, weather controls have bridged the gap between automatic firing and automatic heating. Controls automatically and continuously measure outdoor weather conditions, providing averaging control that guides system to deliver greatest comfort with maximum economy. *Weather-Man* controls for steam and *Weather-Flo* controls for hot water and warm air systems are available with timing mechanism for complete daily or weekly programming, making possible early morning warm-up and night setback, both governed by outdoor temperatures. *Weather-Chron*, an automatic weather re-set time switch, is designed for use in any electrical, pneumatic, or electronic thermostat control circuit wherein space temperatures must be lowered at night or over the week end, and raised again automatically. Mfr states that greater comfort and substantial fuel savings are effected by controls. Outstanding installation feature is full field-adjustability. All calibrations are plainly marked in actual temperature readings and any

qualified p-h serviceman can make this installation.

AIA FILE NO. 30-E-1

MFR: AUTOMATIC DEVICES DIV., AMERICAN MACHINE AND METALS, INC.

Circle 316 for further information



### DUAL-DENSITY DUCT LINER

*Micro-Bar* dual density fiber glass duct liner is described in brochure no. 1N-302A. Advantages of dual-density duct liner in checking air erosion, cutting noise, and improving insulating efficiency are stressed as well as its low fire hazard rating. Also included is description of material which is resilient, semi-rigid blanket type insulation composed of strong, very fine inorganic glass fiber bonded by thermosetting resin to form two different densities of insulation; a tough heavy density on the surface and a light density underneath. Brochure contains illustrations of various application techniques, before and after forming of sheet metal, including joints that eliminate use of coatings, sealers, or metal nosings at leading edges. Complete specifications for various thicknesses of *Micro-Bar* are included. (8 pp.)

AIA FILE NO. 37-D-2

MFR: JOHNS-MANVILLE CORP.

Circle 317 for further information

### DUAL DUCT AIR CONDITIONING

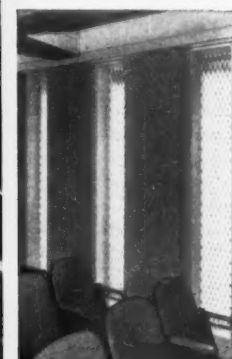
Details on the practical applications of dual duct air conditioning along with schematic drawings of typical dual duct arrangements are being offered in bulletin entitled, *Architects Guide to Dual Duct Air Conditioning*. Bulletin (DD-7) is intended to fill gap in the availability of literature on dual duct systems to architects and consulting engineers. High velocity systems are designed to maintain a desired temperature for comfort air conditioning in buildings

A use of Security Panel which is growing in popularity with architects is shown at the right. It is often specified as a guard on stairways in schools and plants; thus it serves its double purpose as a protective barrier and as decoration.

The lobby of a large Miami hotel has a false ceiling of Security Panel. The panels not only diffuse the light evenly throughout the lobby, but also give the ceiling an attractive, distinctive appearance.



The striking beauty of Security Panel is shown in its use as glazing material in this church. Architects specified the distinctive Resolite Panels for the side windows of the church (below).



# Resolite Security Panel

## A Functional and Decorative Building Material

This flat sheet—a combination of polyester resin translucent panels and expanded metal—provides the designer with a material that possesses high dimensional stability and high impact strength. Architects have found "Security Panel" desirable as cover, separation, decoration or protection, and in applications which combine two or more of these functions.

In addition, "Security Panel" is manufactured in a variety of sizes and colors. For complete information write today for our new booklet on RESOLITE Security Panel.



**Resolite Corporation**

P.O. Box No. 539, Zelienople, Pa.  
Distributors in Principal Cities

Circle 147 for further information

## LITERATURE

having many zones with varied heating and/or cooling requirements. Dual duct system has found wide application in office buildings, hospitals, hotels, schools, apartment houses, and other modern structures where selective temperature control in individual spaces is required. (16 pp.)

AIA FILE NO. 30-F

MFR: BUENSOD-STACEY CORP.

Circle 318 for further information

### AIR MIXING UNITS

Certified sound data for dual duct mixing units has been compiled and is being offered in bulletin contained in Engineering Data Sheet E-29. Contents were furnished and certified by Michael J. Kodaras, acoustical consultant, following tests on air units which mixed air in volumes ranging from 200 to 800 cubic feet per minute. Sound readings for H-type units were taken with units discharging air directly into 7' x 11' test room with no ductwork or outlets to provide additional attenuation. Wall and ceiling surfaces of test room were covered with 2" thick fiberglass board. Microphone was located four feet below and five feet in front of outlet unit. Sound readings for V-type units are for free standing unit (without enclosure) located in 7' x 11' test room with microphone two feet in front of and one foot above unit.

AIA FILE NO. 30-A

MFR: BUENSOD-STACEY CORP.

Circle 319 for further information

### FORCED-DRAFT BOILERS

Current bulletin, 149 D, describes forced-draft Scotch type packaged boilers for high and low pressure commercial and industrial applications. These boilers can be fired with natural gas, all grades of fuel oil, or combination gas/oil, and have certified output ratings from 83 to 691 hp for the low pressure units, and 82 to 672 hp for the high pressure units. Illustrated with photos and line drawings, bulletin contains ratings, dimensions, and technical data in easy-to-read tables. Also included are typical specifications and a list of standard and optional factory-mounted accessories. (12 pp.)

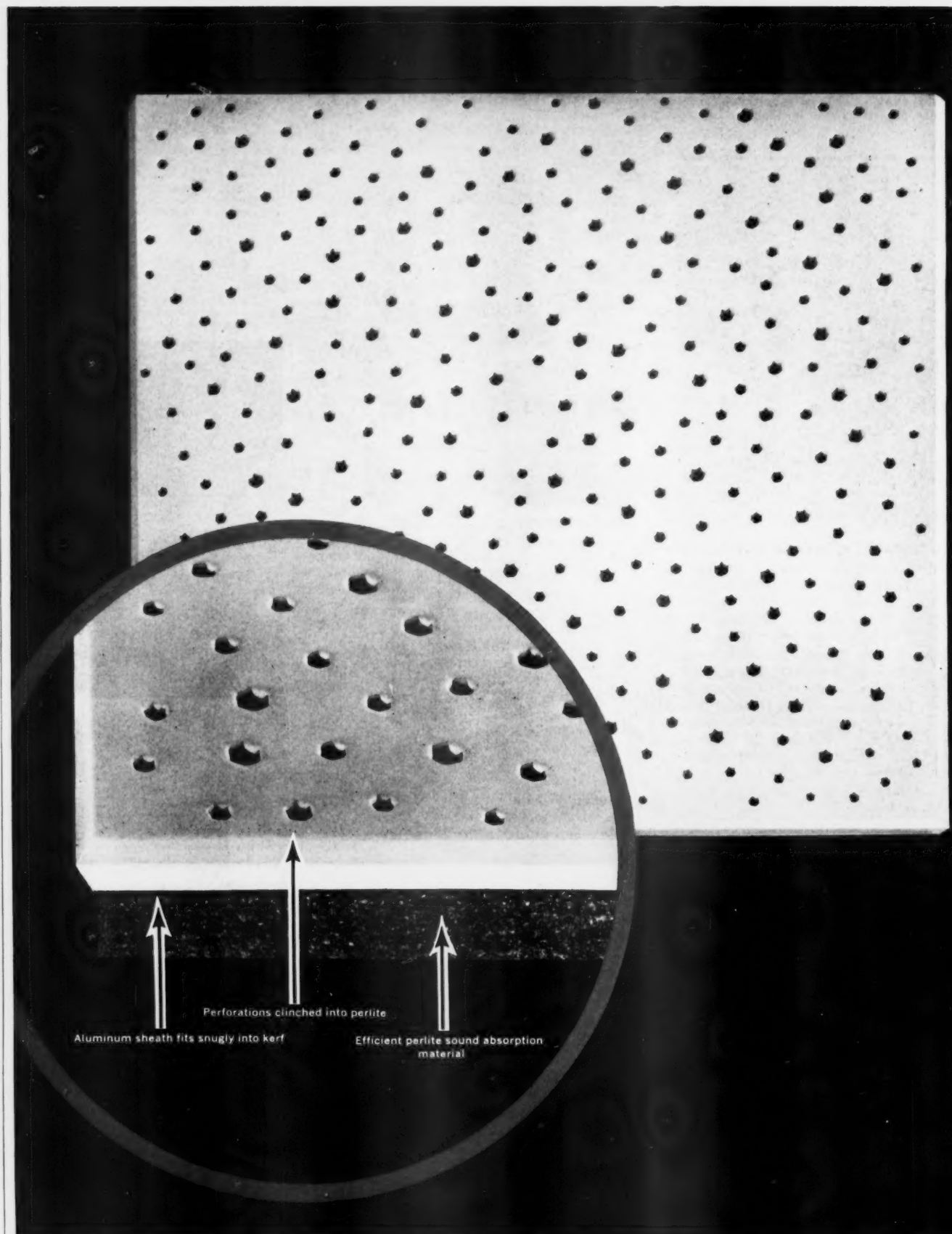
AIA FILE NO. 30-C-1

MFR: AMERICAN-STANDARD INDUSTRIAL DIV., AMERICAN RADIATOR & SANITARY CORP.

Circle 320 for further information

### ELECTRIC HEATING

Three application and installation manuals on electric heating now available. *Electric Comfort Heating, Insulation and Design* (20 pp.), dis-



Circle 148 for further information

# NOW! SOLO-TILE FROM JOHNS-MANVILLE

New advance in sound control... a metal-faced, incombustible tile that can be either cemented or suspended! Unique Johns-Manville process assures permanent bond of perforated aluminum facing to perlite\*-based, sound-absorbing units.

\*Expanded volcanic ore

◀ **HOW SOLO-TILE IS MADE**—An aluminum sheath, factory-enameled, is inserted snugly in the kerf on all four sides of the tile (left). Then it is punched and each perforation in its surface clinched into the perlite. No separation of aluminum sheath and perlite-based sound absorbing material is possible—ever.



**CAN BE CEMENTED OR SUSPENDED**—Incombustible Solo-Tile® is the *only* metal-surfaced acoustical tile that can be put in position either of two ways... suspended or cemented in place.



**CAN BE WASHED REPEATEDLY**—Unique metal-over-perlite construction means you can wash tiles as often as you please. Enamel coating, baked on at the factory, withstands water, detergents. Dirt is removed easily.

For full details on unique new SOLO-TILE... the metal-surfaced tile you can use anywhere... write for "Folder 57A—Solo-Tile," Johns-Manville, Box 158, Dept. AEN 1060, New York 16, N. Y. Offices throughout the world. Cable address: Johnmanvil.

**JOHNS-MANVILLE** 

Circle 148 for further information

## LITERATURE

cusses need for insulation, heating calculations with heat loss tables, operating cost calculations, and definitions of terms in heating design. *Installation of Baseboard Heaters and Wall Mounted Heaters* (12 pp.), presents photos and diagrams on the preparation for installation of standard-wattage and factory assembled baseboard heaters, forced-air and radiant-wall heaters, and room thermostats and accessories. *Embedded Radiant Heating Wire* (20 pp.) discusses design of wire, location of thermostat, branch circuit wiring, installation in plastered ceilings, gypsum wall boards and concrete floors, plus a catalog of radiant heating wire units.

AIA FILE NO. 30-C-44

MFR: ELECTRIC COMFORT HEATING SECTION, GENERAL ELECTRIC CO.

Circle 321 for further information

### IMMERSION HEATING/COOLING

Double-embossed *Panelcoil* is stated to be particularly suited for immersion heating or cooling. Technical bulletin *M-11* illustrates various types of standard and special double-embossed *Panelcoil*. Double-embossed units are stronger than single-embossed design and offer a lower pressure drop because the channels are twice as large. Sizes and shapes are almost unlimited in variety and can be formed to fit almost any space and can be assembled in special banks to give high capacity per cubic foot. Product is stated to be a replacement of old style pipe coil and of heavy, bulky integral jacketing.

AIA FILE NOS. 30, 29-B

MFR: DEAN PRODUCTS, INC.

Circle 322 for further information

### CONCRETE CONSTRUCTION

#### STEEL WELDING

Information on welding of reinforced steel for heavy concrete construction is given in data sheet 5, now available. Welding process developed specifically for this type of work is described and welding procedures are illustrated and explained in detail. (2 pp.)

AIA FILE NO. 13-C-2

MFR: THERMEX METALLURGICAL, INC.

Circle 323 for further information

#### CALCIUM CHLORIDE/CONCRETE

Technical manual on calcium chloride in concrete now available. It contains data on major effects of calcium chloride, early and ultimate strength, cold weather protection, high early strength cement, and air entrained concrete. It includes research on the relation of calcium chloride to early



Now the *FIRST* American  
utilization of the famous  
*Bison* system . . .

# Duraflake

A NEW WOOD FORMED BOARD providing  
more internal strength and a smoother,  
order surface.

## a better board because . . .

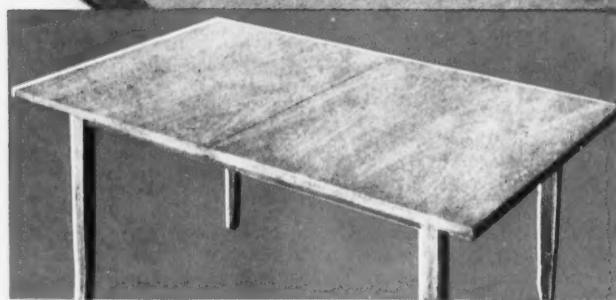
- Fine surface prevents telegraphing.
- Excellent screw holding properties.
- Strong internal bond.
- Maximum dimensional stability.
- Tight core for outstanding edge and face cutting.
- Machinability.
- Superior modulus of rupture.
- Uniform density.
- 5' x 16' press for great latitude of sizes.
- Teco quality control.

Mail coupon today for Duraflake brochure or information on specific application:

Wood Fibreboard Co.  
P. O. Box 245  
Albany, Oregon

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Duraflake brings to the industrial and building fields a new board much superior to boards presently available. The unique Bison system ingeniously forms the boards with the larger wood flakes in the middle and progressively graduates the flakes so that the "fines" automatically form the top and bottom surfaces. Proved by test against telegraphing in use. The resins are applied to the wood particles in such a way as to insure uniform coverage of the largest as well as the smallest particles. This achieves the highest possible internal bond. Duraflake is superior in smoothness, strength characteristics, drilling and cutting and construction qualities. You will find Duraflake the practical, economical, superior wood formed board with a thousand uses. For information of specific applications mail coupon today.



Duraflake is ideal core material for fine furniture. No telegraphing through finish veneer. Cross banding not necessary. The same fine results are achieved in industrial and building uses.

## Wood Fibreboard Company

P. O. Box 245 • Albany, Oregon  
Telephone WAbash 8-3341 • TWX Albany 696

## LITERATURE

strength, both compressive and flexural, ultimate strength, curing, workability and density, cold weather concreting, and a section dealing with calcium chloride versus extra cement. Manual also contains section on special conditions where calcium chloride is used advantageously—and there are several specifications in the booklet. Charts illustrate lab data from numerous nationally recognized technical organizations (40 pp.)

AIA FILE NO. 4-A

ASSN: CALCIUM CHLORIDE INSTITUTE  
Circle 324 for further information

### LIGHTWEIGHT CONCRETE

Wide use of lightweight aggregate concrete in modern construction is featured in current bulletin. Photos and job reports picture variety of uses for this material. Job reports describe role played by *Pozzolith* in providing adequate workability for proper placement while economically maintaining sufficient strength to meet structural requirements. Thirteen construction projects are featured with discussions covering use of lightweight concrete as strong, durable material for columns, beams and floor slabs, multi-story structures, thin shell concrete, and bridge decks. (20 pp.)

AIA FILE NO. 4

MFR: MASTER BUILDERS CO., DIV.,  
AMERICAN MARIETTA CO.

Circle 325 for further information

### CONCRETE SLABS

Bulletin describing *Maco-Form* for concrete roof and floor slabs announced. *Maco-Form* is standard 1/2" x 26" corrugated sheet with 2 1/2" corrugations, available in 24, 26, and 28 gauge. Corrugated sheets available in lengths of 8'3", 9'3", and 10'3" in black or galvanized finish. *Maco-Form* is anchored with hardened screw nails, button welding, or plug welding through welding washers. Bulletin contains load tables and installation instructions. (4 pp.)

AIA FILE NO. 4-D

MFR: MACOMBER, INC.

Circle 326 for further information

### OFFICE AIDS

#### WASHING TRACING FILM

Process of restoring printability of original tracings simply by washing them with soap and water is described in bulletin, *Tracings You Can Wash*. Included with bulletin is sample of washable *Herculene* drafting film plus *Duralar* pencil, which puts down a waterproof plastic line. The reader can thus make the wash-

test for himself. *Herculene*, said by mfr to be virtually indestructible, has waterproof base of *Mylar* polyester film. *Duralar* pencil forms bond of extraordinary strength with film and is unaffected by wash treatment, mfr states. Bulletin gives instructions on how to make test after soiling tracing with dirt and graphite. (1 pp.)

AIA FILE NO. 35-H-3

MFR: KEUFFEL & ESSER CO.

Circle 327 for further information

#### REDWOOD SIDING ESTIMATOR

Pocket-sized Redwood Siding Estimator offers builders and specifiers time-saving means of figuring siding costs and quantities. Estimator covers four standard redwood patterns and shows the amounts of siding in various nominal widths need for each square of wall coverage. Siding quantity is expressed in both lineal and surface measure. Estimator also computes quantity of nails needed per square and enables an accurate estimate of costs based on local prices. Charts show suggested nailing methods as well as suggested nail sizes for standard patterns covered by the estimator. Patterns include bevel, bungalow, tongue & groove, and drop sidings.

AIA FILE NO. 19-D-2

ASSN: CALIFORNIA REDWOOD ASSN.

Circle 328 for further information

#### PLUMBING

##### IRON BODY GATE VALVES

Individual catalog sheets for four iron body, bronze mounted gate valves now being issued. Sheets illustrate latest modifications in construction and capabilities are indicated on body face of each valve. They include non-rising stem Figure No. 16F, screw end, and Figure No. 17F, flanged end; outside rising stem and yoke Figure No. 19F, screw end, and Figure No. 20F, flanged end. Sizes of No. 16F range from 2" to 10", No. 17F from 2" to 12", No. 19F from 2" to 10", and No. 20F from 2" to 20". All four types of valves are now available for 125 lb. W.S.P. and 200 lb. W.O.G., and conform to Federal Specifications WW-V-58, Type 1, Class A, where applicable.

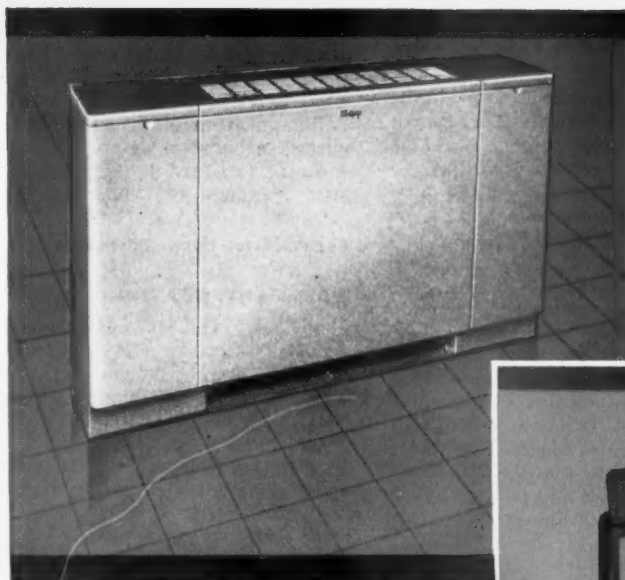
AIA FILE NO. 29-B-4

MFR: AMERICAN VALVE MFG. CO.

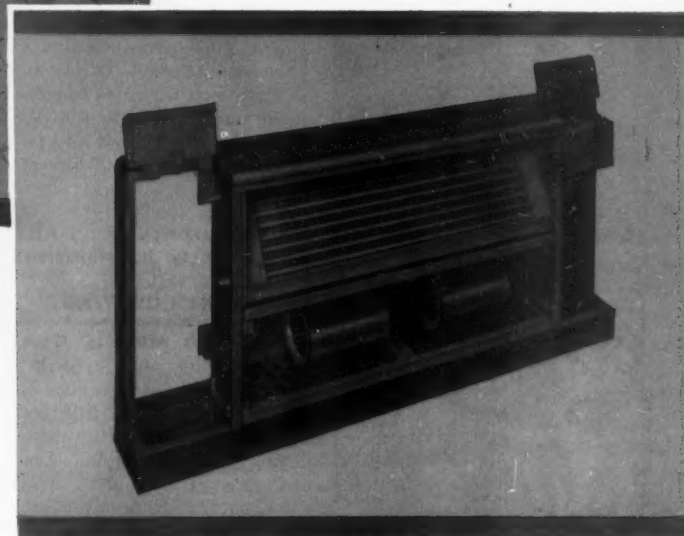
Circle 329 for further information

##### INSULATED PIPING

Thermal and physical characteristics of *Mono-Kover* one-piece pipe insulation for service from below zero to 350°F, are comprehensively described in technical bulletin J-660. Bulletin describes and illustrates in color mineral fiber material's ease of application and handleability.



You get more built-in quality and performance with McQuay features



EXTRA LARGE PIPING COMPARTMENTS • COMPLETE SLIDE-OUT FAN DECK ASSEMBLY • MOTOR DISCONNECT PLUG • FIELD REVERSIBLE COILS • FILTER REMOVAL WITHOUT REMOVING PANELS • ADJUSTABLE LEVELING LEGS • REMOVABLE PANELS FOR EASY INSTALLATION • FULL RATED CAPACITY • QUIET, EFFICIENT OPERATION • QUALITY MATERIALS CRAFTED BY QUALITY WORKMANSHIP • BAKED ENAMEL FINISH ON BONDERIZED GALVANIZED STEEL.

## APPRECIATED MOST

*by those who specify, install and use individual room*

## MCQUAY *thin-line design* SEASONMAKERS

**NOW  
4 MODELS  
7 SIZES**

220 TO 1240 CFM

McQuay thin-line design Seasonmakers are extremely versatile, dependable and exceptionally easy to work with. That's why engineers, contractors and building operators alike appreciate them most. These remote, individual room units are ideal for apartments, motels, hotels, offices, hospitals or any installation utilizing a central station heating and cooling system. They are available in four types in seven sizes. Floor and basic models are made in sizes from 220 to 1240 cfm; hide-away and ceiling models from 220 to 640 cfm.

Investigate the many advantages these thin-line design McQuay Seasonmakers can offer you on your next job. Contact your local McQuay representative, or write McQuay, Inc., 1669 Broadway Street N.E., Minneapolis 13, Minnesota.

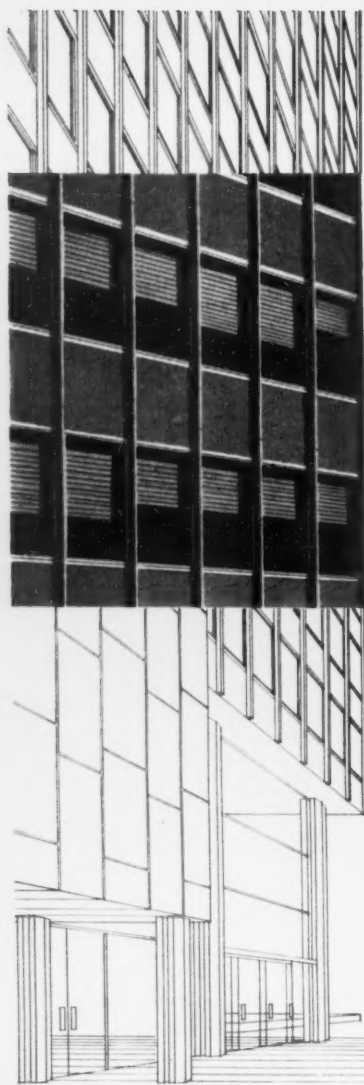
8½" thin, 25" high

**McQuay INC.**

AIR CONDITIONING • HEATING • REFRIGERATION



Circle 150 for further information



## CURTAIN WALL

A refreshing new approach to metal curtain wall construction—Series 400 by Albro. It combines new design flexibility with light weight, economy and fast installation. Albro fabricates a complete line of aluminum, bronze and stainless steel systems—all backed by over 30 years of metal engineering know-how. See them in Sweets or write

**ALBRO**  
METAL PRODUCTS CORP.  
944 Longfellow Avenue  
New York 59, New York

Circle 151 for further information

## LITERATURE

Thermal conductivities of light-weight, resilient insulation are shown graphically. Tables present available sizes and thicknesses according to nominal pipe sizes and actual pipe o.d.'s. Available sizes and thicknesses for standard copper tubing sizes are also given. Third table suggests recommended thicknesses for various pipe sizes and operating temperatures based upon heat loss desired. Recommended thicknesses for cold piping and dual-temperature service are also given. Bulletin describes seven different factory-applied facings with which product is available. Applicable federal and ASTM specifications are noted and recommended application specifications provided. (4 pp.)

AIA FILE NO. 29-B-82

MFR: BALDWIN-EHRET-HILL, INC.

Circle 330 for further information

## SEALANTS/COATINGS

### TALK ON MASTIC COATINGS

Availability of bulletin on mastic coatings announced. Bulletin is edited version of talk by Frank M. Kennedy, Jr. at the recent convention of the National Association of Corrosion Engineers, held in Dallas, Texas. Mr. Kennedy discusses meaning of term "mastic coating" and then goes on to describe the various additive ingredients which make up the many different final products available. Both applications and limitations of mastics are covered. Information concerning the proper preparation of the surface and application of the material is also included. In addition, details are given concerning the method for specifying the most economical mastic coating for a given job.

AIA FILE NO. 24-B

MFR: EMJAY MAINTENANCE ENGINEERS

Circle 331 for further information

### SEALER FOR ASPHALT SURFACES

Current bulletin describes *Para-Seal*, black-top sealer coat to renew asphalt surface. Premature deterioration of black-top pavement from frost, rain, snow, ice, salt, gasoline, oil, and battery acid has been a problem for years. Moisture and chemicals penetrate and widen the tiny crevices between the aggregate in the asphalt. This promotes frost damage and hastens deterioration. Bulletin tells how *Para-Seal* fills the pores and cracks in asphalt, wrapping each aggregate particle with a flexible, frost-proof coating. Water, acid, gasoline, and oil cannot penetrate *Para-Seal* to destroy adhesion; sun-

light can no longer soften asphalt; temperature extremes cannot damage or dry out the asphalt, mfr states. Characteristics, surface preparation, and application and coverage are discussed in bulletin. (2 pp.)

AIA FILE NO. 12-A-1

MFR: PARAMOUNT INDUSTRIAL PRODUCTS CO.

Circle 332 for further information

## PAVEMENT COATING

Application Bulletin, descriptive of *Vynatex 23*, colored protective coating for asphalt pavement, offered. Features include complete description of product, available in grass green, concrete gray, and brick red. Bulletin supplements information in *Vynatex 23* catalog.

AIA FILE NO. 4-D-4

MFR: MAINTENANCE, INC.

Circle 333 for further information

## CONCRETE SEALER

Technical data bulletin, Index No. JRC-P-D, descriptive of Jennite J-16-R (rubberized) sealer for critical high traffic areas of concrete pavements and parking decks, available. Contents include complete application directions and performance characteristics. On parking decks, product is said to produce wear-resistant, non-skid surface and prevent moisture absorption and subsequent drippage to lower levels. (3 pp.)

AIA FILE NO. 3-B-1

MFR: MAINTENANCE, INC.

Circle 334 for further information

## MISCELLANY

### ACOUSTICAL PRODUCTS

1960 Acoustical Products catalog is currently being distributed to architects, acoustical contractors and general contractors. Printed in red and black, the catalog illustrates and describes complete line of acoustical products. Included are four textures of *Forestone* woodfiber acoustical ceiling tile, *Forestone* ceiling board and roof deck, standard drilled roof deck, standard and random drilled acoustical tile, fissure mineral tile, metal acoustical units, perforated cement asbestos board, and perforated hardboard. Tables of technical information and physical characteristics, specifications, installation pictures, and mounting tips, are also included. (20 pp.)

AIA FILE NO. 39-B

MFR: SIMPSON LOGGING CO.

Circle 335 for further information

### STRUCTURAL DEVICES

Comprehensive catalog on timber connectors, framing devices, and installation tools is available. Illus-

trated, publication provides architect, engineer, and builder with complete specifications and details on full line of products including recently expanded line of *Teco-U-Grip* joist and beam hangers for 2 x 4 to 4 x 14 members, *Du-Al-Clip* framing anchors, and *Fas-Lok* metal bridging which requires no nails. *Trip-L-Grip* framing anchors and split rings, shear plates, spike grids, clamping plates, and toothed rings are also described. Designers and builders receiving catalog will find of special value tables of recommended working loads for *Teco-U-Grips*, *Trip-L-Grips*, and *Du-Al-Clips*. Information on the installation of *Fas-Lok* bridging are also provided. (8 pp.)

AIA FILE NO. 14-J

MFR: TIMBER ENGINEERING CO.

Circle 336 for further information



## METAL FRAMING SYSTEM

*Unistrut Metal Framing Construction and Maintenance Handbook*—two-color, illustrated handbook on mechanical and electrical fields—is now available. Handbook gives application and installation information, specifications, and methods of attaching to structures using *Unistrut* metal framing. Authentic engineering and performance data are listed. Typical illustrations show practical applications such as how to support pipe, conduit, cable, build rigid frames, support fluorescent fixtures, provide raceways, support bus bars, construct electrical substation structures, and mount equipment. Basic introduction to *Unistrut* metal framing system is also included. Booklet explains how *Unistrut* metal framing system cuts design and installation costs and achieves precision results on the job. Parts commonly used in mechanical and electrical applications are listed. (36 pp.)

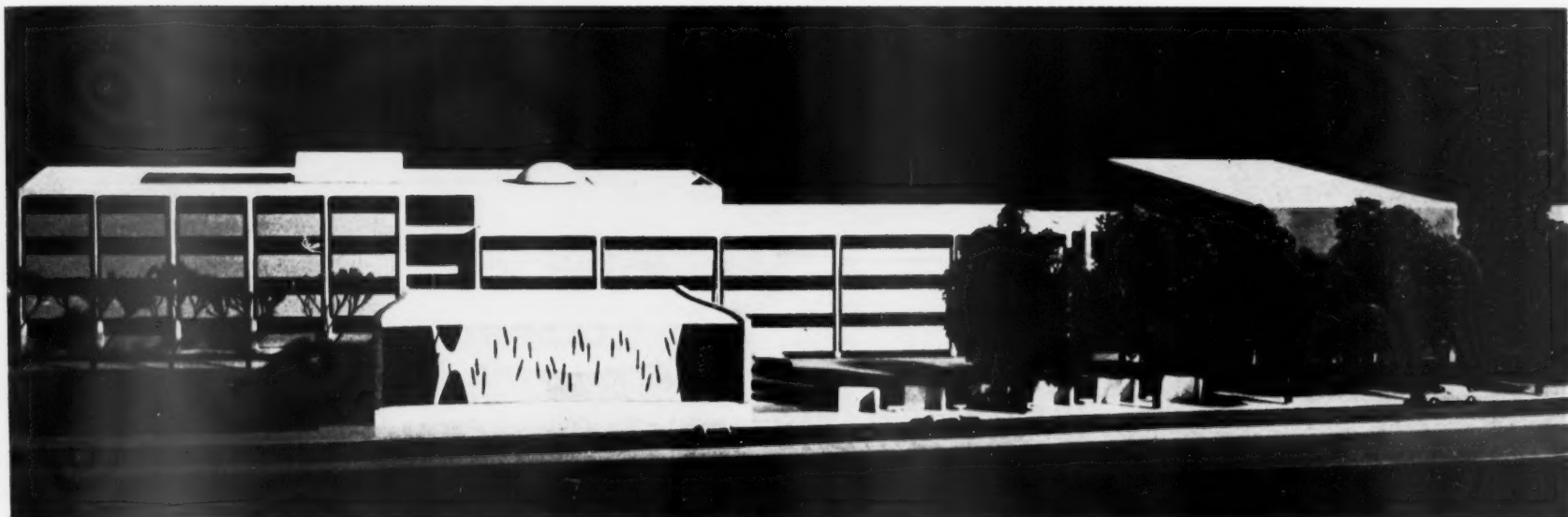
AIA FILE NO. 14-G

MFR: UNISTRUT PRODUCTS CO.

Circle 337 for further information



TEMPLE UNIVERSITY PHYSICS BUILDING	project
TEMPLE UNIVERSITY	client
NOLEN & SWINBURNE	architects
SEVERUD-ELSTAD-KRUEGER, ASSOCIATES	structural engineers
CALDWELL ENGINEERING, INC.	mechanical engineers
BOLT, BERANEK AND NEWMAN	acoustical engineers
JOHN MCSHAIN, INC.	general contractors



TEMPLE UNIVERSITY'S \$3.7 MILLION PHYSICS BUILDING NOW UNDER CONSTRUCTION ON THE CAMPUS OF TEMPLE UNIVERSITY, PHILADELPHIA

#### TEMPLE UNIVERSITY PHYSICS BUILDING

##### General description of program

Currently under construction in Philadelphia and scheduled for occupancy this fall, the Temple University Physics Building is part of a \$55 million Temple master expansion plan, designed by Nolen and Swinburne. The new building will accommodate 2,200 students (2,000 undergraduates and 100 graduate students), plus professors and staff. A flexible interior plan provides for revision of space as needed for future requirements.

##### General features

The building will house two fields of study—physics and biology. It will feature a series of contract laboratories where graduate students and professors will conduct research work for companies engaged in contract work. A rooftop weather station with facilities to measure wind speed, wind direction, temperature, relative humidity, rainfall and barometric pressure, will transmit data to a series of dials in the lobby. A special nuclear laboratory will be completely copper-lined with all the special precautions for working with radio active materials. Concrete storage blocks extend six feet underground and will be designed to contain lead-lined box at the bottom of a six-inch hole. Another unusual feature will be a special anechoic chamber to be built as a testing space for delicate instrumentation. It will be lined with fibrous glass and literally suspended for complete absence of sound in an echo-less enclosure. Special craftsmen will be used for its installations. A complete television circuit for the building, both open and closed systems, will be installed. Other facilities include a museum, Foucault pendulum and planetarium.

##### Plan elements

The site for the laboratory is one city block, of which the building occupies 5,000 square yards. The building will consist of four stories and complete basement and will contain four basic units: classroom, lab teaching, faculty research and lecture. There will be 31 classrooms, 36 laboratories, and 45 faculty research labs and offices. The lab teaching unit will house ultrasonic, spectroscopy, physiology and bacteriology laboratories. Each professor will have his own research laboratory, some of which will contain elaborate equipment.

Two large lecture halls on the ground level will seat a total of 350 students. Equipment used will be the most advanced available. There will be complete facilities for visual aids, including hydraulically operated colored glass blackboards. A fully equipped planetarium will be located on the fourth floor and will include a large 20-foot dome ceiling visible from the outside. The planetarium will seat 40 to 50 people.

To meet the basic utility and service design problems, a vertical riser system will be used. There will be 10 multiple systems, each system serving two laboratories per floor.

##### Structural, electrical, HVAC

The building, of reinforced concrete with flat plate floor systems, will be faced with cast stone, with end walls of brightly colored brick. A total of 8,700 cubic yards of concrete and 700 tons of reinforcing steel will be used. There will be aluminum sliding windows with dark gray-brown, heat-absorbing glass. The glass will cover an area of 21,000 square feet.

From a substation in the building, routine power and lighting distribution systems will feed all panel boards. Some 290,000 feet of wire will carry 13,200 volt serv-

ice. Design levels of illumination will range from 30 to 50 footcandles. A total of 1,436 fluorescent fixtures will be used throughout the building.

High pressure steam available at the university's central plant will be extended to the building. Converters and pumps will provide a forced hot water system operating under zone controls. All essential piping will be exposed to view and accessible for repair. The building will be completely air-conditioned with 500 tons of equipment.

##### Areas and costs

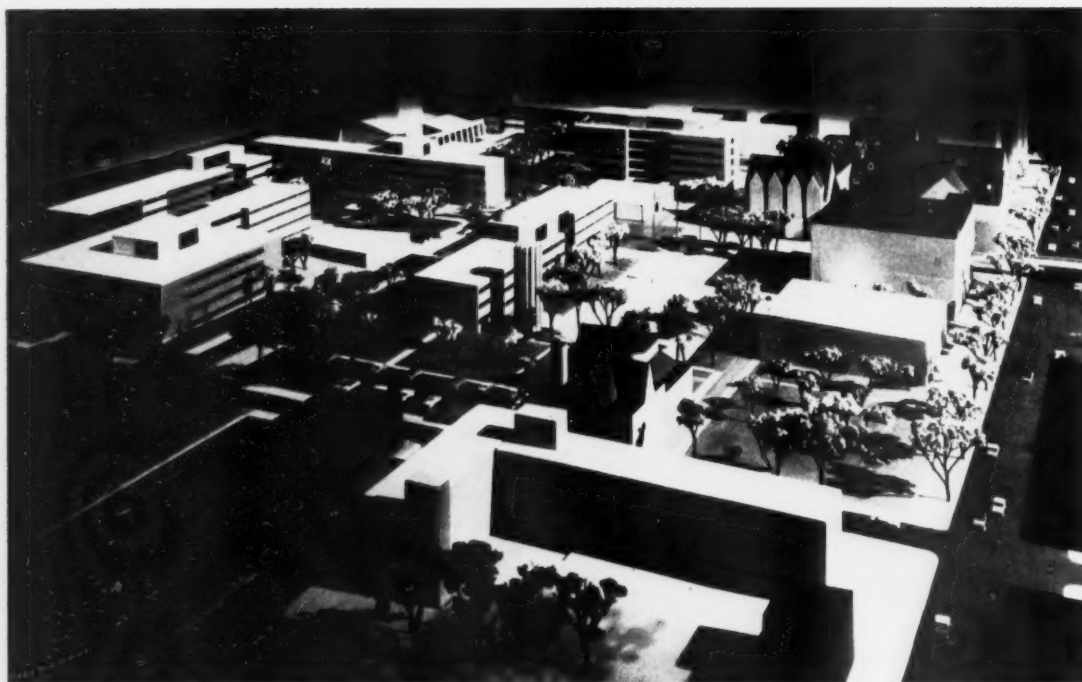
Total gross floor area	155,000 square feet
Total volume	2,000,000 cubic feet
Total cost	\$3,700,000

#### TEMPLE UNIVERSITY MASTER PLAN PROGRAM

##### Broad aspects of planning

Nolen and Swinburne believe that programming and master planning for all university work must be in the following terms: The end goal to be realized is the superior education and training of all men and all women. Each university in accepting its portion of this responsibility must establish its own limits and develop its own philosophy as to how it will best help in attaining this end. In planning for the educational process, the university must examine six important considerations:

1. *People.* This includes the students, faculty and administration who will study and work in the university.
2. *Land.* The physical and social environment of surrounding areas must be considered, as well as the immediate site of the university.
3. *Buildings.* Contemporary structures should embody the most advanced principles in sciences and the arts, and be designed to serve a flexible educational pro-



Model of Temple University as projected in the master plan developed by Architects Nolen and Swinburne

gram without hindrance from preconceived ideas in form or style.

4. *Time.* The long-range aspects of planning look into the future, from 50 to 75 years hence. They see these distinct phases in this projection—*Phase I*, immediate needs of the university, *Phase II*, known future requirements, *Phase III*, unknown future requirements.

5. *Money.* The financial problems of construction and maintenance, of borrowing and amortization require expert advice and careful planning.

6. *Change.* The probability, the inevitability of a future shift in thinking means that the expansion program is to be geared for any revisions or additions. Changes in education, and their accompanying needs, will occur. These changes are not only inevitable, they are desirable; a fixed and static concept of a university is not good. Plans must be versatile, flexible and alive to the fact that in any given period of years, the educational process will vary, and so will the educators and administrators.

#### Temple's approach to expansion

Early in the 1950's, Temple University faced the prospect of accelerated enrollment in the years to come. Existing facilities were overcrowded and inadequate. Some \$3 million was invested to relieve conditions in a general classroom building, a women's dormitory and law school facilities. Pressure was not relieved, however, as increased enrollment flooded these new spaces and pressure was greater than ever. Meeting the total long-range problem of expansion with building, piece-by-piece, proved not to be the answer.

Under the direction of President Robert L. Johnson, Temple University set up a realistic program for expansion that might well serve as a prototype. He appointed an assistant to the president for development and a small physical plant steering committee. These men reflected a balance of interests.

In 1956, a design contract was signed with Nolen and Swinburne. They were asked first to develop an over-

all master site plan ranging over the next 50 to 75 years, and then to prepare preliminary plans, specifications and cost estimates in great detail for all those buildings immediately needed by the university. A complete design and report were completed within five months to be used as a basis for future action.

#### Highlights of design and report proposals

Temple is an urban university located in the heart of Philadelphia. Its educational facilities are primarily available to the city and the greater Philadelphia area, although its enrollment also covers almost every state in the union.

Its convenient location in the center of the great metropolitan area is the major reason behind the need for expansion. It is attracting students at a rate of acceleration that is challenging those schools in suburban or remote locations. Its night school opportunities are rivaling those of the day school; expansion problems in both areas are becoming equally pressing.

An examination of the six considerations cited above revealed the following conditions at Temple University:

1. *People.* Temple's doors are open to all men and all women and the cost of education is as inexpensive as possible. Immediate planning is for 10,000 daytime students and an equal number of evening and graduate students. Within 15 years, this total figure is projected to a total of 40,000. The campus at Temple has been historically the hard asphalt of the streets. The expansion program gives first thought to the people of the university—the students, the faculty and the staff—to give them a campus of their own and make them feel they are the university. The final solution has a feeling for these people woven through the various courts, open spaces and buildings, and it has a respect for human scale and human use.

2. *Land considerations.* Land costs range up to \$400,000 an acre and use for every square foot of ground must be justified. The immediate social environment

of city areas adjacent to the campus is at the bottom of the scale and present real problems of adjustment and up-grading. Temple recognizes that it must do its share in working for a better city, and accordingly, has worked very closely with the City Planning Commission and Redevelopment Authority. Temple is now freeing itself from its compression along Broad St. Escape from the automobile is now in sight. Streets are being erased; off-campus parking is now a reality. Pedestrian overpasses will separate students from high-speed arteries. Open areas and courts are being created among the buildings and are as carefully studied as the structures themselves.

3. *Buildings.* Campus buildings are related to the existing street patterns in such a way as to permit gradual elimination of all internal streets. Access to public utilities is maintained but spaces formed by the omission of streets will become part of an integrated court design. The buildings are grouped carefully so they relate properly to each other, to the existing buildings on the campus and to the expansion program beyond the immediate phase.

Complete flexibility of space and use within all buildings is preserved by using an over-all modular design. Classrooms can be immediately converted to laboratories with preplanned mechanical services already in position. All lecture rooms are one-story buildings and are separated from classroom and laboratory areas. This eliminates great concentrations of traffic in the academic buildings. Public use of lecture rooms also is possible without intermingling with the students. All classrooms, laboratories and lecture rooms are designed and positioned for intensive continuous use from 8 a.m. until 10 p.m. Use factors of 75 per cent or more are contemplated. Except for the business school, no building has classrooms or laboratories above the fourth floor, thus eliminating student elevators. All buildings are air-conditioned throughout.

4. *Time involvement.* Temple University breaks down its total expansion program as follows, with recognition of the possibility of changing requirements over the coming years: *Phase I* (immediate requirements), the science group—physics-biology building, chemistry building, the special facilities groups—business school, teachers college, communications center; *Phase II* (known future requirements), student union addition, physical education, men's dormitory, library addition, law school additional classrooms, women's dorm addition and power plant addition; *Phase III* (unknown future requirements).

5. *Money.* The total project cost of Phase I, including land, buildings, furnishings, equipment, fees and contingencies, is \$25 million. Phase II will be approximately the same, bringing the total known required expenditure over the next 15-year period to \$50 million. In any long-range program such as this, it must be kept in mind that building prices vary widely from year to year. Between 1946 and 1956, the index of building prices doubled. This is an average increase of 10 per cent per year for the past ten years. The costs of the development program were based on the cost of construction for June, 1957. Construction costs, if they continue the trend of the past several years, can be expected to increase substantially. For each year the program is delayed beyond 1957, funds required for completion must be increased accordingly.

6. *Change.* All those who have worked on the Temple program expect it to change. The educational program, as projected, and the physical plant required to house it are the product of those forces in effect in 1957. As time progresses, it will bring change. Temple University is ready for this and expects that any change made will be for the better.



## PREPARATION OF NON-METALLIC SURFACES FOR PAINTING

*From an address by Thomas P. Moran, Vice President of National Chemical & Manufacturing Corp., Chicago, Ill., delivered before the 1960 Spring Conferences of The Building Research Institute, held in April 1960, New York City.*

### New surfaces

The first person who deals with a new surface either minimizes or magnifies the future problems of maintenance and redecoration. If, because the surface has not been prepared properly, the finish loses adhesion, or cracks, or peels, or blisters, or fails in any way, the subsequent preparation for repainting will be more arduous and more costly. Also, if unsuitable finishes are used or if quality is sacrificed for the sake of price, failures of various sorts occur making the preparation for repainting costly and placing the success of repaint jobs in jeopardy. It is easy to see, in view of this, that the original specification for painting and its proper execution by the painting contractor will determine to a very large extent the cost and the success of future painting. We will first deal with new surfaces never painted before.

### New interior surfaces

**INTERIOR PLASTER:** All gouges, nicks, and scratches should be filled with a good grade of spackling compound and sanded smooth. All dust and dirt should be removed by dusting or by washing. If the surface is to be primed with a solvent type primer, then it should first be treated by brushing a zinc sulfate solution on the surface and allowed to dry. When the surface is completely dry, the resulting crystals should be brushed off the surface and it is then ready for the prime coat. If an emulsion type primer is to be used, or if the wall is to be finished with an emulsion paint without priming, the zinc sulfate treatment must be omitted. The wall should be primed or painted immediately after the removal of the dust and dirt by washing. Note here that when the emulsion products are to be used, the wall need not be dry when painted.

**PLASTERBOARD WALLS, COMMONLY CALLED DRY WALL:** All joints must be covered with joint cement and tape, and all nails must be countersunk and covered with joint cement. The joint cement at joints and over nail heads should be sanded smooth and feathered at the edges. Care must be taken in this operation that the paper surface of the board is not fuzzed up by the sanding. Following the sanding, all dust should be wiped from the surface—this can be done by the use of a damp sponge. The surface is then ready to be primed with an emulsion type primer or to be finished with an emulsion type paint. Solvent type primers should not be used, since they tend to raise the nap of the plasterboard.

**FIBREBOARD AND HARDBOARD:** Wall surfaces should have all nails countersunk and filled with spackling compound and sanded smooth. They can then be primed with any good wall primer. Fibreboard can be painted with emulsion type finishes without priming.

**CONCRETE WALL SURFACES:** All holes, cracks, and surface imperfections should be filled and smoothed. A material that works well for this purpose is the latex concrete mixtures now being marketed. All form oil or form release compound must be removed from the surface. This can be accomplished usually by scrubbing with a solution of trisodium phosphate (4 oz. to gallon of water)

following by rinsing with clean water. An alternate method is to etch the surface with muriatic acid solution. In using this material, the surface should be wet down with water first, then the acid solution should be brushed on the surface. The etching should proceed till the surface has the texture of a fine sandpaper. The surface should then be rinsed thoroughly with clean water. If solvent finishes are to be used, the surface should be permitted to dry thoroughly. This precaution is unnecessary if an emulsion finish is to be used.

**CONCRETE BLOCK OR AGGREGATE BLOCK SURFACES:** All holes, cracks, and other imperfections should be filled and smoothed. Mortar joints should be pointed if necessary. All dirt, dust, and other foreign material should be removed by brushing or washing if necessary. Depending on the density of the block and the type finish desired, the surface should be filled using a good quality block filling material. Cement type preparations should not be used for this purpose unless it is certain that the applicator will keep the surface wet for 48 hours after application in order to assure hydration of the cement. Because of this requirement, it is extremely risky to specify this treatment.

**ACOUSTICAL SURFACES:** Acoustical tile ordinarily has a factory applied finish when installed. If unpainted, it should be free of dust at time of painting. A finish should be selected that does not interfere measurably with its sound absorbing properties.

**ACOUSTICAL PLASTER:** This material varies widely in composition. The blown on type should receive no preparation and should be painted only by spraying. Since the plaster itself has no cohesive strength, the finish applied must be very light and not continuous. This can be successfully decorated by a mist spray of casein paint in the desired color. Acoustic plaster of the troweled on type should be free of dust and dirt and should be finished lightly with a material that will not seriously interfere with its sound absorption.

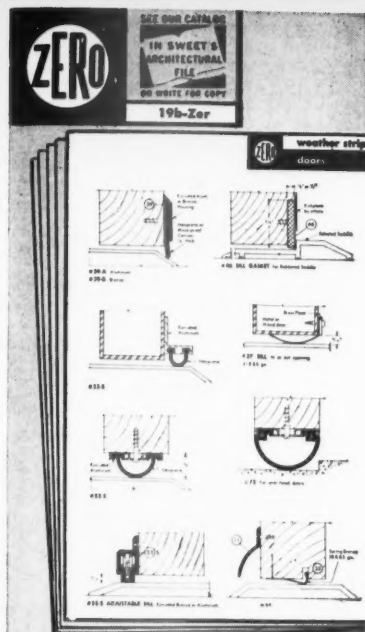
**WOODWORK AND WOOD PANELING:** All nail holes should be countersunk and filled and the surface should be sanded smooth using a 2/0 or 3/0 flint or garnet paper. The surface should then be dusted thoroughly. Close grained woods are then ready for staining or for sealing depending on type finish desired. If penetrating stain is used, the surface should again be sanded prior to sealing. For fine work, a tack cloth should be used before application of the sealing coat. Open grained woods should be treated with a wood filler and sanded prior to staining, thereafter, the procedure is the same as for close grained woods.

**WOOD FLOORS:** Should be treated in the same manner as described for woodwork and wood paneling. Sanding in this case is done with a floor sanding machine.

**CONCRETE FLOORS:** Should be etched using a muriatic acid solution. The floor should be wet when the acid solution is applied. This etching should be allowed to proceed

(Continued on page 66)

A/E NEWS DIGEST REPORT: PREPARATION OF NON-METALLIC SURFACES FOR PAINTING AIA FILE NO. 25



do your  
weatherstripping  
detailing  
faster, easier,  
more accurately  
with  
Zero's  
new  
catalog



FULL SIZE design and installation details make visualization easier . . . speed incorporation directly into your plans with a minimum of scaling—minimum chance for error.

ZERO's new 28-page catalog also contains helpful application data and many time-saving suggestions for detailing weatherstripping.

SEND FOR YOUR COPY TODAY!

Weather stripping for:

- doors • windows
- saddles • lightproofing
- soundproofing
- sliding doors • saddles for floor hinged doors



**ZERO WEATHER STRIPPING CO., INC.**

453 East 136th St. • New York 54

Phone: LUdlow 5-3230

Circle 152 for further information

September 1960



## DIGEST:21

until the surface has the texture of a fine sandpaper. The floor should then be thoroughly rinsed with generous quantities of clean water. In the event an emulsion floor paint is to be used, the painting should be done while the concrete is still damp. If a solvent system is employed, the surface must be bone dry. Some of the emulsion concrete floor paints do not require etching. However, in these cases the floor should be thoroughly scrubbed with a trisodium phosphate solution, thoroughly rinsed with clean water, and painted while still damp.

### New exterior surfaces

**WOOD SIDING:** All nails should be countersunk and puttied. Knots and sap streaks should be coated with a special knot sealer or a cut back shellac. (With some grades of putty, the puttying must be done after the primer is applied because of absorption of the putty's vehicle by the raw wood.) The surface is then ready for the prime coat. If solvent type primer is to be used, the moisture content of the wood should be below 15 per cent when tested with a moisture meter. If a new emulsion type primer is used, this precaution is unnecessary. However, if applied over excessively damp wood, the emulsion primer should be allowed to dry for a longer period.

**WOOD SHINGLES:** Require the same preparation as for wood siding.

**SASH AND TRIM:** These areas require the same preliminary preparation as for siding. If a sash and trim enamel is to be used, it is suggested that the primer be a quick drying hard primer in order that alligating or checking will not result.

**MASONRY EXTERIOR SURFACES:** Concrete surfaces should be washed with trisodium phosphate solution (4 oz. to gallon of water) and thoroughly rinsed to remove form oil or form release compounds. Holes and cracks should be patched and smoothed off. If the surface is to be finished with an emulsion type finish, no further preparation is required. If a solvent type primer is to be used, a zinc sulfate treatment as prescribed for interior plaster is desirable to neutralize any surface alkali. Finishes selected should be alkali resistant and should be tinted with alkali proof colors.

**CONCRETE BLOCK AND AGGREGATE BLOCK:** Cracks and holes should be patched and mortar joints pointed. The surface should be free of dirt and dust. Brushing the surface may be sufficient to remove this. If not, the surface should be washed and rinsed. Depending on the density of the block, a block filling treatment should be applied prior to painting with an alkali resistant masonry finish. Cementitious type block fillers should be avoided, since they so frequently lead to failure of the paint film.

**BRICK SURFACES:** Should be clean and free of dust and dirt. Mortar joints should be pointed. Where brick is to be painted, the surface should not receive an acid cleaning. Alkali resistant finishes should be used. If solvent type finishes are to be used, the surface should be thoroughly dry. This precaution is unnecessary when emulsion finishes are to be used.

**STUCCO:** All cracks and holes should be patched. The surface should be clean and free of any dusting. If solvent type finishes are to be used, the stucco must be thoroughly dry. This precaution is unnecessary when emulsion finishes are to be used.

**CEMENT ASBESTOS SHINGLES AND BOARD:** Glazed or waterproofed shingles should be allowed to weather before painting. The surface should be clean and free of dirt, dust, and mildew. Mildew should be removed by washing with a trisodium phosphate solution followed by a treatment with a solution of laundry bleach (sodium or calcium hypochlorite). This treatment should be thorough so that no mildew spores are left on the surface.

**SWIMMING POOLS—CONCRETE:** It is essential that a very thorough patching job be done on all cracks and holes in swimming pool walls and floors. The surface should then be etched with muriatic acid solution. The procedure should be as follows: Soak the surface well

with clean water. Apply a 10 per cent muriatic acid solution to the surface. Continue application until the surface has a texture like fine sandpaper. Rinse surface thoroughly using copious quantities of clean water. If the pool is to be painted with a solvent type finish, allow the surface to dry thoroughly. If an emulsion finish is to be used, the surface should be kept damp while the first coat of paint is applied.

**CONCRETE PATIOS:** Preparation of these surfaces should be the same as for the floor of a swimming pool. Again special emphasis should be placed on the filling of all cracks and holes where moisture might penetrate.

### Previously painted surfaces

The preparation of previously painted surfaces is considerably more complex than that for new surfaces, the reason being that these surfaces have frequently been complicated by previously poor preparation or by unwise selection of finishing materials as well as by the ravages of time and the use to which they have been put. This is an area in which those responsible for the maintenance of surfaces should avoid temporary expedients. Temporary corrective measures, while more economical at the moment, are always more costly in the long run. It must be borne in mind that the substrate, together with any coats of paint that may be on it, is the foundation for any new decorative coating and should be in sound condition to support it.

### Previously painted interior surfaces

**INTERIOR WALL SURFACES:** The surface should be inspected thoroughly to determine what preparation will be necessary. Washing of the surface to remove dirt, dust, and grease accumulations is invariably desirable. All loose, scaling, blistered paint should be removed by scraping and the edges of these areas should be feather sanded so that a smooth, even surface results. All cracks and holes should be patched with spackling compound or other suitable material and sanded smooth. If efflorescence is in evidence on the surface, a search should be made for the source of moisture entry, and the necessary corrective steps should be taken. A thorough sealer coat should be applied where necessary to assure a surface of uniform porosity. If the examination mentioned previously shows failures such as blistering, cracking, peeling, checking, or alligating to have progressed to more than 10 per cent of the surface then all the old finish must be removed. This removal on interior surfaces is best accomplished by the use of paint and varnish remover. These materials are available with non-flammable solvents. Follow the manufacturers directions for their use, and be sure that they are used with adequate ventilation. Following removal of the previous paint films, the surface should be treated as a new surface. If a wax containing paint remover has been used, it will be necessary to remove any residual wax by washing the surface with naphtha or mineral spirits. Certain substrates such as concrete and concrete block or aggregate block lend themselves to other removal methods such as the use of power scrapers or power wire brushes, or wire brushing by hand.

**WOODWORK AND WALL PANELING:** Where these surfaces have previously been stained and varnished, they should be examined for surface imperfections such as scratches, gouges, and holes, and these should be sanded away if possible. If not, they should be filled and sanded smooth. The filler should be matched in color to the rest of the wood. The surface should then be sanded lightly to dull the gloss, or one of the surface preparer preparations should be used for this purpose. If the surface has been waxed, all wax must be removed. This can be accomplished by using one of the many preparations sold for this purpose. Again, as in the case of wall surfaces, if examination shows serious failure of the previous coating by alligating, checking, peeling, blistering, or serious discoloration, then all finish should be removed back to the wood. A paint and varnish remover of the non-flammable, wax free, scrape off type should be used. The wash off type removers should not be used, since their

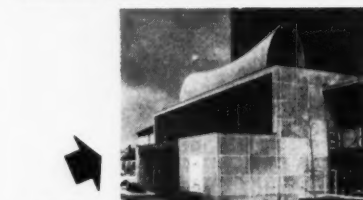
THIS MODERN CHURCH  
has Perlite job-mixed  
plaster Inside ...  
Perlite insulating  
concrete Outside



St. Theresa Church, Garfield Heights, Ohio



View of the nave shows walls and suspended ceiling. The construction is Perlite acoustical plaster sprayed over metal lath.



Perlite concrete sprayed on angle iron ribs, covered on both sides with metal lath, forms a strong, lightweight, insulated hypodermic roof.

Job-mixed Perlite plaster and Perlite insulating concrete reduces dead-weight. It cuts weight to less than half that of sand plaster or concrete, is easier to handle and, because less water is required, dries quicker, allowing earlier decoration and job completion. Perlite aggregates offer greater permanent insulation and increased fire protection.

Investigate Perlite aggregates for your next project. Start now by writing for new Data Sheets PL-6 (plaster) and PL-7 (concrete) . . . Perlite is also available in Canada.



**Perlite  
INSTITUTE, INC.**

International Association of Perlite Producers  
45 W. 43TH ST., NEW YORK 36, NEW YORK

Circle 153 for further information

Architectural & Engineering News

## CORDLEY COOLERS

**Better Built  
Better Guaranty  
Better Buy**



**CORDWALL**  
off the floor,  
on the wall.

**BUBBLER**  
models —  
3 to 27 G.P.H.



**REFRIGERATOR**  
bubbler and  
bottle models —  
also hot and cold.

**REMOTE**  
for hollow walls,  
also other models.



**A Model For Every Need.**  
Send for catalog.



2432

**CORDLEY & HAYES**

443 Park Avenue South, New York 16, N. Y.

Circle 154 for further information

September 1960

## DIGEST: 21

water content may raise the grain of the wood and may stain the wood. If the previous finishes are removed, the surface should be treated as a new surface.

**WOODWORK AND WOOD PANELING:** If examination of the surface reveals failures such as cracking, peeling, checking, or alligatoring over a substantial portion of the surface, the procedure described above for removal of the finish should be followed. If the surface does not need removal, it should be examined for cracks, scratches, holes, and these should be repaired by filling with spackling compound and sanding smooth. If the surface is glossy, the gloss should be dulled by sanding or by treating with a surface preparer. All patches should be spot primed to assure a surface of uniform porosity for painting or enameling.

**WOODEN FLOORS:** These should be examined for evidence of the type failures mentioned under woodwork and wall paneling, which would necessitate removal of the finish. If this is necessary, a paint and varnish remover of the non-flammable, wax free, scrape off type should be used. If, however, service of the floor has resulted in the complete removal of the finish in some areas with resulting wear and discoloration of the wood itself, sanding of the floor will be necessary. A floor sander and edger should be used by a skilled operator. The resulting surface must be treated as a new surface. Refinishing schedules should be set up on a basis that will not make this necessary, since after a few sandings the floor must be replaced. If the condition of the floor does not indicate removal by either solvent or sanding means, the floor should be washed thoroughly to remove all dirt and wax. Fine steel wool used with a trisodium phosphate solution does a good job. Allow the floor to dry thoroughly before revarnishing.

**WOODEN OR CONCRETE FLOORS:** Examine for evidence of failure, as above, that would necessitate removal of the finish. If this is necessary, a non-flammable, wax free, scrape off paint and varnish remover should be used, except that on concrete floors the wash off type is satisfactory. If removal is not warranted, the floor should be scrubbed thoroughly with a trisodium phosphate solution and a stiff fibre brush. A scrubbing machine does this very efficiently in larger areas. After rinsing thoroughly, the floor may be painted.

### Previously painted exterior surfaces

**GENERAL:** All exterior surfaces should be examined for evidence of these conditions: (1) *mildew*, (2) *efflorescence*, (3) *peeling*, *cracking*, or *flaking*, (4) *alligatoring*, (5) *excessive chalking*, (6) *staining*, (7) *excessive paint buildup*, and (8) *blistering*.

**WOOD SIDING:** The preparation to be given a surface must be determined by a thorough examination of the existing conditions. Wood siding is subject to all the general conditions mentioned above with the exception of efflorescence. Various combinations of these conditions are common. **Mildew:** For successful repainting, all mildew must be removed. This is best accomplished by a thorough washing using an alkaline cleanser followed by a washing with a strong solution of a laundry bleach of the hypochlorite type. Some recommend using bichloride of mercury solution for this purpose, but this material is much too dangerous to make it a general recommendation. **Peeling, cracking or flaking:** All peeling, cracking, or flaking paint should be removed by scraping and wire brushing. If the condition is general, the best procedure is to use a flame treatment to remove all the old finish. Burning off a paint should be done by an experienced, skilled operator. **Alligatoring:** Where this condition exists, removal is called for. The usual cause of this condition is the presence of a soft undercoater, and there is no sure remedy other than complete removal.

**Excessive chalking:** If all the chalk can be removed from a spot by gentle rubbing, the preparation can be a simple dusting of the surface. If the chalk face is deep, it should be removed by scrubbing of the surface with a stiff fibre brush and a solution of trisodium phosphate and water followed by a rinsing. A penetrating primer can be

used to bind down the chalk, but this method of preparation would have to be classified as an expedient, since there is no assurance that it will correct the situation. **Staining:** In the case of sap stains, a knot sealer or cut back shellac should be used to seal it in. Where evidence of water stains exists, a thorough search for the source of the water should be made and corrective measures should be taken to prevent a recurrence. **Excessive paint buildup:** This is generally the result of many coats of paint or the application of coats which are too thick. The remedy is removal. Flame treatment (burning off) is the most practical procedure. **Blistering:** This is usually caused by water getting behind the paint film. A search for the source of the water should be made and the necessary corrective measures taken.

**WOOD SHINGLES:** This surface is subject to the same types of problems as wood siding. However, it is not feasible to use some of the same corrective measures. Flame treatment, for example, is usually not feasible. The rough or striated surface of the shingle is apt to create too much of a fire hazard. By the same token, scraping is more difficult. Wire brushing is the most practical procedure for removing defective portions of the paint film. All cracked or badly deteriorated shingles should be replaced. In other respects, the same treatments as prescribed for wood siding should be used.

**SASH AND TRIM:** The most common condition interfering with repainting of this surface is alligatoring or severe checking, and should be corrected by removal of the finish from the affected areas. On these areas, the use of a solvent type paint and varnish remover is the most practical solution. Bear in mind that the cause of severe alligatoring or checking is the use of an undercoat which is too soft. Consequently, when these areas must be stripped and refinished, it is important that the primer be carefully selected and that it be permitted to cure thoroughly before applying the finish coat.

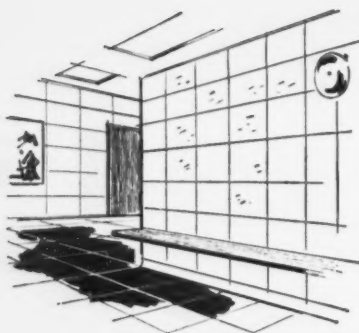
**MASONRY SURFACES:** (Including concrete, concrete block, aggregate block, brick, stucco, and cement asbestos board or shingles.) These surfaces are subject to all the failures of wood surfaces and in addition, sometimes have the problem of efflorescence. The surface should be examined to determine whether or not removal of previous coats is required. Where cementitious coatings have previously been used, complete removal is always recommended before repainting. The suggested methods of removal are, in the order of their efficiency: (1) *sandblasting*, either dry or with steam, (2) *power scraping or brushing*, and (3) *hand brushing*. Where the finish has been removed, the surface can be treated as a new surface. In those cases where the old finish is in an acceptable condition for repainting, the surface may be treated in the same way as a previously painted wood surface. Of course, in any case, all cracks and holes should be patched with a suitable patching material and smoothed out. Asbestos cement board or shingles should not be sandblasted, since this treatment is likely to destroy them. The coping of masonry walls should always be repaired at the time the painting is scheduled and the back faces of parapet walls should be thoroughly waterproofed by the roofer.

**SWIMMING POOLS AND PATIOS:** To assure good service and attractive appearance, these surfaces should be refinished on an annual schedule. This kind of a decorating schedule will do much to prevent deterioration of the concrete surface.

### Conclusion

This has been by no means an exhaustive or thorough treatment of the subject matter. However, I think that complete removal of old finishes or other equally drastic treatment has been mentioned frequently enough to alert everyone to the necessity of preventive treatment—The thorough preparation of new surfaces and the wise selection of finishes, together with a regular maintenance schedule which assures that finishes are not exposed too long and that preventive measures against failure are taken at regular intervals.





# 3/8" CV DURATHIN

helps you win  
the battle  
of quality versus  
budget

Now, Federal Seaboard has developed CV Durathin—the thinnest possible terra cotta facing—without sacrificing straightness, strength or durability. This new economy-priced ceramic facing material is available in a virtually unrestricted choice of colors and textures, in sizes up to a maximum of 18" x 24". Because of its thinness, light weight and large-sized units, 3/8" CV Durathin costs less to buy and install yet assures the durability, lasting color and low maintenance associated with Ceramic Veneer. Face distortion and size tolerance are limited to 1/16" of an inch or less, and units are available with bull nose on one, two, or three sides.

For complete information  
about 3/8" CV DURATHIN  
write to:

FEDERAL  
SEABOARD  
TERRA COTTA  
CORPORATION  
10 East 40th St., New York 16, N. Y.  
Plant at Perth Amboy, New Jersey



Circle 155 for further information

## NAMES

**MINORU YAMASAKI, FAIA.** This Seattle-born architect has risen, in the span of very few years, from virtual obscurity to a position of world-rank as one of America's foremost designers. Recently he received the approbation of his professional colleagues by his elevation to the rank of Fellow of the American Institute of Architects at the 1960 San Francisco convention.

Yamasaki's fame and professional success is hard won. He has known the indignities common to Japanese-Americans. Inspired by an architect uncle, he had the intense desire and singleness of purpose to become an architect. Upon graduation from the University of Washington, he went to New York where he lived through a rigorous apprenticeship, working as a draftsman and marking time during the acrimonious World War II years of animosity and indiscriminate prejudice against persons of his ethnic origin.

In 1945, he secured a position in Detroit—where in the course of the ensuing years he has established his practice. Bit-by-bit, he made critical progress which ultimately culminated in his first professional partnership which was responsible for the barrel-vaulted air terminal building at St. Louis. The years of arduous work and the ensuing tension produced a near-fatal case of ulcers in 1954. Yamasaki was compelled to undergo an enforced and extensive convalescence. He utilized this time by going to Japan. There, he became absorbed in its artistic culture—with particular emphasis on its architecture. As a result of his sojourn in Japan, his subsequent work has demonstrated the influence of the Orient by an architectural expression remarkable for its delicate aesthetic intricacies. Perhaps, the now famed and often-quoted phrase, "serenity and delight" would best describe the emotive value of Yamasaki's design.

To achieve this architectural quality, Yamasaki has, it would appear, turned his back on much of the contemporary practice of utilizing a glass-skin design for structures. A fair description of his buildings may be that they present modules of curvilinearly-formed precast concrete sections articulated into sensitive patterns of extremely delicate tracery. Yamasaki is stated to prefer the use of precast concrete produced by the *Shockbeton* process resulting in high-strength properties which have excellent weathering properties. His aesthetic, structural and technological theories apparently have borne prolific and elaborate fruit.

Today, the 47-year architect's practice, Yamasaki, Leinweber and Associates in suburban Birmingham, Michigan, is swamped with commissions of extremely significant and inordinately high character. The practice is varied and its work extends to the far corners of the world.

His sudden and sensational success has not altered his oft-expressed humanistic concern for the horrendous impact of our modern technology and the sterile uniformity, chaos and restlessness that it has engendered. In an interview reported in *Time* magazine, he stated, "We have speed, traffic, fear, congestion and restlessness. We need a place to put our lives in balance. Architecture is a good place for this. When people go into good buildings, there should be serenity and delight." On another occasion, in speaking before his colleagues, "Our life gives the promise of being spent in look-alike houses, look-alike automobiles and look-alike buildings." These statements underscore his prevailing attitude in his approach to his discipline and his incisive emphasis on human scale in his projects.

A deeply modest and seemingly self-effacing man, he applies himself to an absolute dedication to the exercise of these principles. The *Time* magazine interview further reports that, "As a person, he is still fighting an uphill battle; because of his race, he was forbidden to build a home for himself in a fashionable Detroit suburb. He is not bitter. 'Only in America can people like myself get anywhere or try to do the things they want to do,' he says. He feels himself a thoroughly indigenous American architect coping with particular American architectural problems. 'Most of the great architecture of the past,' he once said, 'was built for monumental purposes—to impress or awe the masses. Our democratic ideals need buildings that give us, instead of a sense of awe, a sense of happiness, peace, security.'"

Minoru Yamasaki is, indeed, a thoroughly indigenous, American architect. His work in architecture will remain as one of the hallmarks of the best of our architectural heritage and we look forward to many, many more of his buildings to grace this fair American landscape.





## EDITORIAL

**Post script on interiors:** Much has been said and depicted in this current issue on the subject of interior design. We believe that this is still an important area of professional and immediate interest to the architect. We are convinced that the completed building complex is meaningless without its final expression being evidence of the architect's hand. The architect is a controller of environment in his design. Often, however, this important phase of his practice—interior design—is considered last. Quite often it is not considered at all. Indeed, we feel that many an architect has surrendered his prerogatives in the areas of interior design.

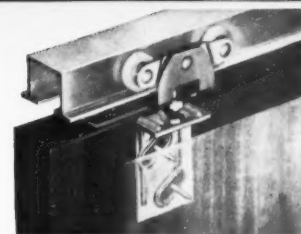
Often, prospective clients think of the architect only as a technician—the man “who draws blueprints”. He is thought of as a mechanic who specifies bricks and mortar or utilitarian lighting. The notion that architecture is nothing less than a total bio-physical expression of environment is basic to the profession, but perhaps least understood by the public. We are not speaking of the sophisticated client who is already educated to the benefits of the services of the architect. We have in mind the huge audience—of prospective clients—who have been led to believe (via mass communications media) that the architect's sole function is to provide a structural shell and the actual work of creating a livable and psychologically satisfying interior environment is the proper and exclusive work of others.

As a result, a lot of meretricious and intellectually poverty-stricken—but expensive ideas have been permitted to flourish and confuse the interior picture. Interiors have become a matter of fashion—the whim of the “dernier-cri”—provided and wrapped-up in a plethora of contrived nonsense—all in the name of “gracious living.” Just visit the next home-furnishings show and you will have mute evidence. We are not suggesting that architects should take up the work of furnishing residences—but by extension, our profession is now facing the challenge of others, who are stating, by their words and deeds of promotion, that the architect is purely a technician to serve the “artistic” needs of others who “create” interiors. Today banks, museums, offices, theaters, and many other building types are being developed wherein the design control of the interiors has passed from the hands of the architect.

If this is a true picture of the architect's status—he can only incriminate himself for this state of affairs. A broader campaign of educating the public must be developed. In this way we will preserve, extend and enhance the image of the architect as the “master builder.” The interiors of a building project are not step-children to the architect's practice. They present a significant challenge to his capabilities of creative expression and reinforce his position as a talented and skilled professional. We feel that our profession should be more aggressive in presenting the value that the architect can generate by his performance throughout the entire building program—both within and without. JJC



*Seven out of ten charwomen concur: For superior response to “kneeing,” it's Grant 7000 Sliding Door Hardware. Write for your copy of the Grant catalog.*



## GRANT SLIDING DOOR HARDWARE



GRANT PULLEY & HARDWARE CORPORATION

Eastern Division/ 133 High Street, West Nyack, N. Y.  
Western Division/ 944 Long Beach Ave., Los Angeles 21, Calif.

sliding door hardware • drawer slides • drapery hardware • pocket frames • pulls • special sliding hardware • closet rods

Circle 156 for further information



## THESE STEPS LEAD TO THE MODERN ROOF- ACCESS DOOR

Interior ladder access to the roof, on single-story as well as multiple-story buildings, adds up to convenience and safety your clients will appreciate. BILCO scuttles help you to achieve those "clean" building lines, lock securely, give only authorized personnel an easy route to and from the roof in all kinds of weather.

BILCO roof scuttles combine rugged construction, weathertightness, effortless operation, the safety of one-hand opening and closing, to insure lasting satisfaction. Available in standard and special sizes in a variety of materials to fill your every requirement.



See Sweet's Architectural  
and Engineering Files  
for Complete Details

### HORIZONTAL SPRING-OPERATED DOORS

**The Bilco Co., New Haven, Conn., Dept. A-19**

Please send me your new catalog on special service doors.

Name \_\_\_\_\_  
Firm \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Circle 157 for further information

## INDEX

to advertisers

- |                |   |                |   |
|----------------|---|----------------|---|
| 62             | Albro Metal Products                          | 53             | Lewis Asphalt Engineering Co.                 |
| 7              | American Brass Company                        | 47             | Libbey-Owens-Ford Glass Co.                   |
| 2-3            | American Hardware Corp., P & F Corbin Div.    | 15             | Macomber                                      |
| 40, 42, 44, 46 | American Hardware Corp., Russell & Erwin Div. | 38-39          | R. C. Mahon Company                           |
| 30             | Armstrong Cork Company                        | 54             | Maintenance Inc.                              |
| 42             | Bally Case & Cooler Co.                       | 61             | McQuay Inc.                                   |
| 40             | Barber-Colman Co.                             | cover 3        | National Gypsum Co.                           |
| 32-33          | Benjamin Division, Thomas Industries          | 29             | National Steel Corp., Stran-Steel Co. Div.    |
| 70             | Bilco Company                                 | 46             | Pass & Seymour Inc.                           |
| 37             | Bradley Washfountain Co.                      | 66             | Perlite Institute                             |
| 48-49          | Cambridge Tile Company                        | 52             | Frederick Post Co.                            |
| 44             | Cookson Company                               | 56             | R L M Standards Institute                     |
| 2-3            | P & F Corbin Div., American Hardware Corp.    | 57             | Resolite Corporation                          |
| 67             | Cordley & Hayes                               | 35             | L. L. Ridgway Co.                             |
| 10             | Cornell Iron Works                            | 46             | Roll & File Systems Inc.                      |
| 40             | Crawford Door Company                         | 40, 42, 44, 46 | Russell & Erwin Div., American Hardware Corp. |
| 4              | Dusing & Hunt, Inc.                           | 19-20          | Sargent & Company                             |
| 56             | John T. Fairhurst Co.                         | 46             | Stacor Equipment Co.                          |
| 68             | Federal Seaboard Terra Cotta                  | 51             | Standard Dry Wall Products                    |
| cover 4        | Follansbee Steel Corp.                        | 29             | Stran-Steel Co., Div. National Steel Corp.    |
| 17             | Granco Steel Co.                              | 42             | T & S Brass & Bronze Works                    |
| 69             | Grant Pulley & Hardware Co.                   | 32-33          | Thomas Industries, Benjamin Div.              |
| 36             | C. Hager & Sons Hinge Mfg. Co.                | 55             | Union Carbide Corp.                           |
| 41             | Haws Drinking Faucet Co.                      | 44             | United Management Corp.                       |
| 45             | Hexcel Products Inc.                          | cover 2        | United States Ceramic Tile Co.                |
| 43             | Irving Subway Grating Co.                     | 50             | United States Gypsum Co.                      |
| 58-59          | Johns-Manville Company                        | 9              | United States Rubber Co.                      |
| 54             | Keller Products                               | 11             | Vermont Marble Co.                            |
| 8              | Kirlin Company                                | 60             | Wood Fibreboard Company                       |
| 44             | Lamont & Riley Co.                            | 65             | Zero Weather Stripping Co.                    |

### ADVERTISING REPRESENTATIVES

**NEW YORK**  
Ed Fegan  
Dave Hagenbuch  
Ken Gray  
Hagan Publishing Corp.  
452 Fifth Ave., New York 18, N.Y.  
Longacre 3-6143

**CLEVELAND**  
Ed George  
Architectural & Engineering News  
20001 Lake Road  
Cleveland 16, Ohio  
EDison 3-2733

**ATLANTA**  
J. Sidney Crane  
J. Sidney Crane & Associates  
22 8th St., N.E., Atlanta 9, Ga.  
TRinity 2-6720

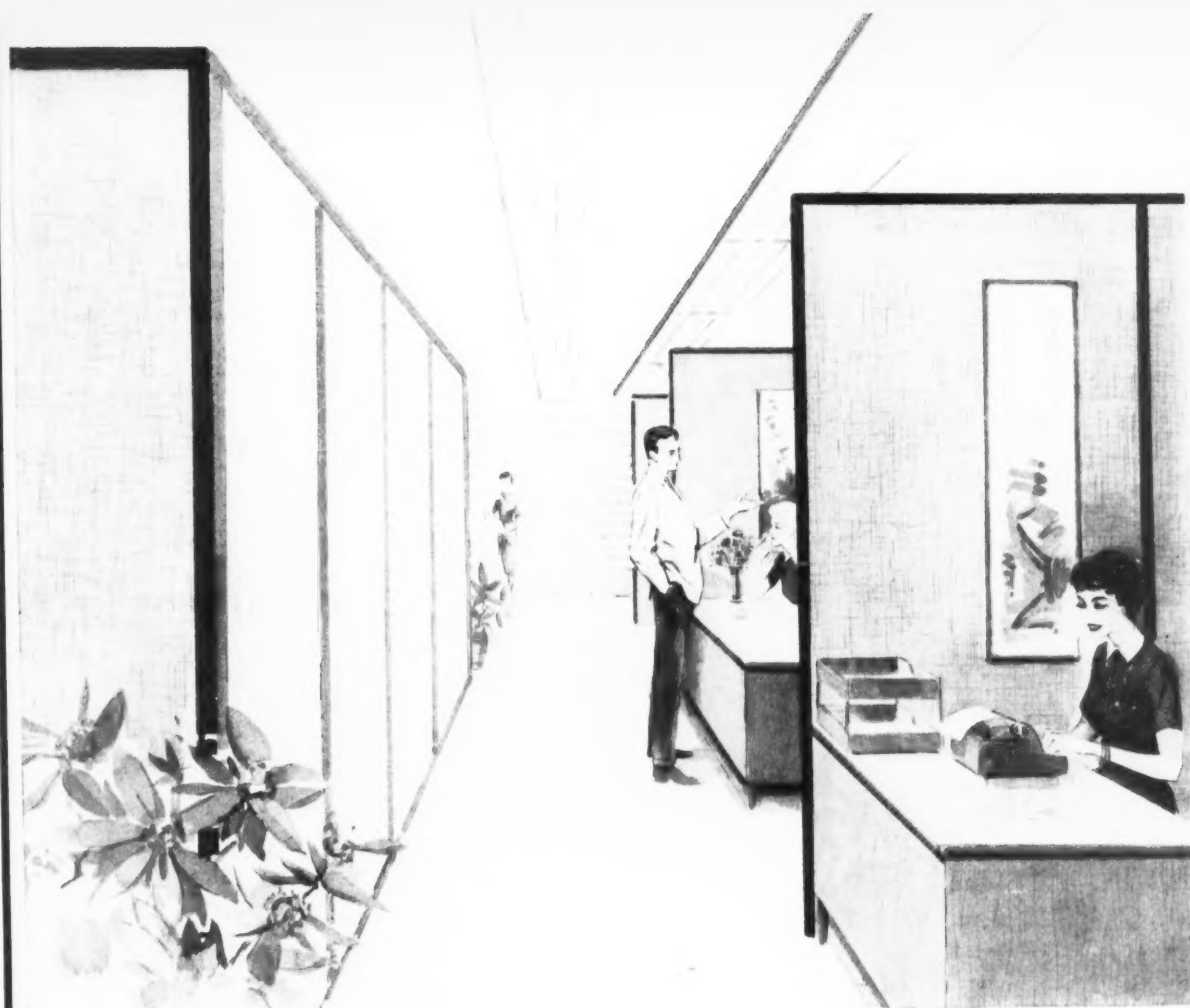
**DALLAS**  
Patrick K. Hall  
Blanchard-Nichols, Inc.  
532 Fidelity Union  
Life Bldg.  
Dallas 1, Texas  
Riverside 7-9138

**SAN FRANCISCO**  
Jules Thompson  
Thompson & Clark Co.  
681 Market St.  
San Francisco 5, Calif.  
DOuglas 2-8547

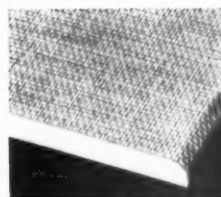
**LOS ANGELES**  
Bob Clark  
Thompson & Clark Co.  
6000 Sunset Blvd., Rm. 202  
Hollywood 28, Calif.  
HOLlywood 3-4111

## CALENDAR

- Sept. 26-28** STANDARD ENGINEERS SOCIETY: annual meeting, Hilton Hotel, Pittsburgh, Pa.
- 26-29** AMERICAN WELDING SOCIETY: national fall meeting, (three sessions sponsored by American Society of Civil Engineers), Hotel Penn-Sheraton, Pittsburgh, Pa.
- 26-30** AMERICAN INSTITUTE OF ARCHITECTS: board of directors meeting, Las Vegas, Nev.
- 27-30** PRESTRESSED CONCRETE INSTITUTE: annual convention, Statler-Hilton Hotel, New York City.
- Oct. 1-5** AMERICAN INSTITUTE OF ARCHITECTS: annual northwest conference, Idaho chapter host, Sun Valley, Idaho.
- 2-4** AMERICAN INSTITUTE OF ARCHITECTS: Gulf states regional conference, Hot Springs, Ark.
- 2-13** INTERNATIONAL SEMINAR ON INDUSTRIAL ARCHITECTURE: Kazimierz, Poland.
- 5** SIXTH ANNUAL ARCHITECTS' TOUR OF JAPAN: 24-day tour. For further information contact Kenneth M. Nishimoto, AIA, 263 S. Los Robles Ave., Pasadena, Calif.
- 5-7** PRODUCERS' COUNCIL, INC.: annual meeting, Drake Hotel, Chicago.
- 11** AMERICAN INSTITUTE OF ARCHITECTS: New York regional annual convention, White Face Inn, Lake Placid, N.Y.
- 12-15** NEW YORK STATE ASSN. OF ARCHITECTS: annual convention, White Face Inn, Lake Placid, N.Y.
- 17-21** NATIONAL METAL EXPOSITION: Philadelphia, Pa.
- 17-21** NATIONAL SAFETY CONGRESS: annual meeting, Chicago.
- 19-23** AMERICAN INSTITUTE OF ARCHITECTS: annual convention of California council, Yosemite National Park, Calif.
- 25-27** 11TH NATIONAL CONFERENCE ON STANDARDS: Sheraton-Atlantic Hotel, New York City.
- 26-27** 1960 COMPUTER APPLICATIONS SYMPOSIUM: sponsored by Armour Research Foundation of Illinois Institute of Technology, Morrison Hotel, Chicago.
- 26-29** AMERICAN INSTITUTE OF ARCHITECTS: western mountain region annual conference, El Conquistador Hotel, Tucson, Ariz.



## New DURASAN PANELS bring scuff-proof beauty to movable partitions



Prominent partition manufacturers now offer insert panels of unusual beauty and durability. These panels are Gold Bond DURASAN...the first vinyl-surfaced Gypsum Wallboard. Durasan with vinyl on *one* side is ideal for fabricating movable partitions featuring greater privacy and fire protection, while Durasan with vinyl plastic on *both* sides answers the need for a simple space divider.

The rugged vinyl surface is completely washable and immune to ordinary scuffs and bumps. Durasan's rich texture and handsome subdued colors blend easily into any decor. Ask your partition manufacturer about the varied uses for Durasan®, or call your Gold Bond® Representative. We'll gladly furnish free sample and literature to those writing Dept. AE-960

NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK

a step ahead of tomorrow...



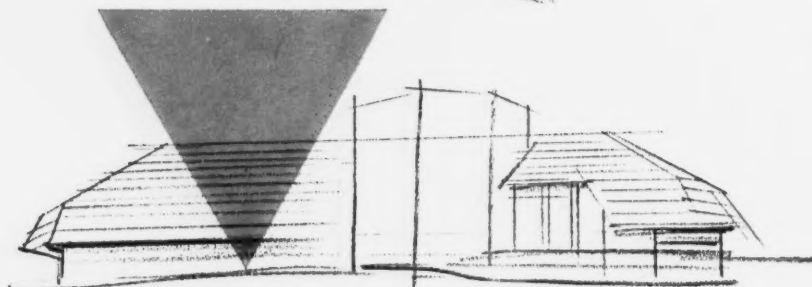
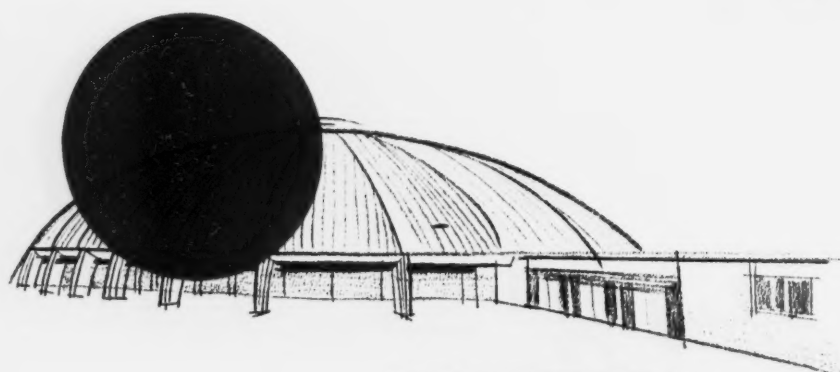
Circle 158 for further information



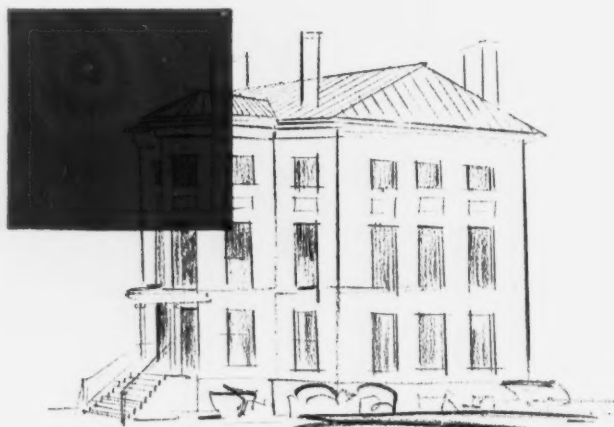
POSTMASTER: FORM 3547 REQUESTED

Consider roofing materials for a moment, along with the roof itself which is still the neglected step-child of contemporary architecture. There is a new concept here, and a material—terne metal—which permits this enormously important visual area to become an integral part of the total design concept. From the standpoint of FORM, ● terne makes available an almost unlimited range of linear effects, of subtle modulations in the interplay of light and shadow. From the standpoint of COLOR, ▼ it allows a freedom of expression as broad as the artist's palette. From the standpoint of FUNCTION, ■ it is virtually unmatched among roofing materials, as many century-old installations dramatically attest. Your inquiry is solicited. **FOLLANSBEE STEEL CORPORATION**

Follansbee, West Virginia



*Follansbee is the world's pioneer producer of seamless terne roofing*



●  
 ALEXANDER MEMORIAL ARENA BUILDING, GEORGIA TECH  
 ARCHITECT: AECK ASSOCIATES, ATLANTA, GA.  
 ROOFING CONTRACTOR: R. F. KNOX COMPANY, INC.

▼  
 DR. FASBENDER CLINIC, HASTINGS, MINN.  
 ARCHITECT: FRANK LLOYD WRIGHT  
 ROOFING CONTRACTOR: SWANSON ROOFING & SHEET METAL

■  
 HISTORIC "OCTAGON" HOUSE, WASH., D.C.  
 HEADQUARTERS A.I.A.

Circle 159 for further information